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The Educated Unemployed in Southeast Asia

Some Principles and Problems of Selective College Admissions

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The Educated Unemployed in Southeast Asia

A Common Problem in India, Indonesia, and the Philippines

By JUSTUS M. VAN DER KROEF

THREE recent press reports from different countries in Southeast Asia reflect a common problem. The government of Madras state in India intends shortly to establish orientation and vocational-rehabilitation centers for the benefit of the "educated unemployed" in order to give them a chance to acquire marketable new skills; the Indian Minister of Education has also announced that special funds are being solicited for the benefit of some 40,000 teachers as part of a general program of relief for unemployed university graduates.[1] At about the same time, the leading Philippine news weekly revealed that "95 per cent of the young men and women who graduate from our colleges and universities each year" (a total of about 34,000) are haunted by "the specter of unemployment,"[2] and from neighboring Indonesia came a statement by the Minister of Education that because of school-construction difficulties, "in the school year 1957–1958 there were . . . 30,332 teachers in excess."[3] Other reports from Indonesia bear witness to the

[1] *The Hindu Weekly Review* (Madras), March 23, 1959, p. 16; April 27, 1959, p. 13. By "educated unemployed" is meant those with higher educational training who are either unemployed or in positions where requirements are far below the qualifications of those holding the jobs. In the absence of accurate unemployment statistics in Southeast Asian universities, it is almost impossible to determine their number. Estimates run as high as half a million in India, 75,000 in Indonesia, and 50,000 in the Philippines.

[2] Leon O. Ty, "College Graduate, What Now?", *Philippines Free Press* (Manila), March 21, 1959, p. 5.

[3] *Indonesian Observer* (Djakarta), March 17, 1959, p. 2.

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growing problem of unemployed university graduates in law and the social sciences.

The paradox of nations with adult populations which are from 40 to 60 per cent illiterate and which at the same time suffer from a surfeit of the academically trained is usually explained in terms of the uneven development of these countries. Economic advance in such nations as India, the Philippines, and Indonesia, all of them faced with a problem of explosive population growth, has not kept pace with the rapid expansion of education since the end of the Second World War. Basic to our understanding of educational values in these countries is the curious manner in which autochthonous, pre-Western concepts of learning tended subsequently to be re-enforced by the colonial policies of the metropolitan powers. In the traditional native culture, learning had an essentially magico-religious character, demanding memorization and rote application of sacred texts; its non-utilitarian function was safeguarded by the ascetic cleric, personified by the Indian Brahman or Indonesian *pudjangga*, for example. Later, the gradual spread of a colonial educational system did not present a dramatic break with this tradition, notwithstanding the progressive introduction of technological novelty into the indigenous culture. For one thing, the metropolitan powers often tended to preserve the forms of traditional feudal culture, making a virtue of "indirect rule" through the employment of indigenous feudal authority in administration. For another, the authoritarian, title-conscious atmosphere of traditional European learning fitted remarkably well into the otherworldly and elite-focused atmosphere of traditional native knowledge.

It has recently been pointed out in the pages of this journal that an academic bent, "isolated from mundane affairs," along with a deprecation of "practical subjects," has characterized traditional European scholarship and scholars.[4] This was, and to some extent still is, the hallmark of higher learning in the postcolonial world of Southeast Asia. A case in point is India, where classical British educational influences have so rigidified the academic structure that an Indian student recently complained that the variety and specialization of education offered in the United States was a hindrance to the returning Indian academician, who found it difficult to apply his specialized knowledge in the teaching program of the Indian schools.[5] In the Philippines, too, where the Spanish tradition strongly molded the educational process, a classical, non-utilitarian orientation has been equally strong, though in all probability not so intense as in most of Latin America, where the highly abstract, intensely scholastic nature of higher education shows the Hispanic colonial influence most clearly.[6]

[4]Joseph S. Roucek, "The Status and Role of American and Continental Professors," JOURNAL OF HIGHER EDUCATION, XXX (May, 1959), p. 263.

[5]Usha Paranjpe, "The Foreign Trained Student of Asia," *The Asian Student*, VII (May 19, 1959), p. 5.

[6]An excellent description of the Spanish colonial educational pattern has been given by William S. Stokes, "The Drag of the Pensadores," *Foreign Aid Reexamined: A Critical Appraisal*, edited by James W. Wiggins and Helmut Schoeck, (Washington, D. C.: Public Affairs Press, 1958), pp. 56–89, especially pp. 68 ff.

THE verbal specialist, steeped in the traditions of humanistic knowledge ("a *guru* in modern dress," one Indonesian friend calls him) has tended to dominate the image of learning in Southeast Asia. One result is the excessively large number of law students in the Philippines and Indonesia. At Gadjah Mada University in Djokjakarta, central Java, which has ten thousand students—almost one-third of the total number receiving higher education in Indonesia—a recent survey shows that "most undergraduates are studying law," and that next in appeal to the students are social and political science. Least popular are curriculums in agriculture, forestry, veterinary medicine, and animal husbandry. Yet at the same time one may hear Indonesia's Minister of Agriculture complain that his service is lacking in skilled and expert workers. Even the city of Bandung, "despite consistent advertising," has been unable to fill vacancies in its municipal services for veterinary surgeons, engineers, physicians, business-service experts, and others. Foreign enterprises in Indonesia, mindful of government insistence that technical personnel be "Indonesianized" as rapidly as possible, have had much the same experience as the Standard Vacuum Oil Company in Indonesia, which has reported that "vigorous recruitment efforts in Indonesia have not turned up the needed number of nationals with requisite educational backgrounds to fill the large number of technical posts."[7]

Nevertheless, those with specialized technical training are growing in numbers, especially in India. University degrees in professional scientific fields, from pharmacy to engineering, are becoming more common—and this raises new problems. For one thing, the technical graduate is often "overeducated" in terms of his country's development needs. What the Southeast Asian area requires most of all is qualified technicians in middle-level employment categories: skilled workers and experienced foremen and supervisors in many different fields. The surfeit of the technically overeducated has resulted in their tragic, wasteful underemployment. From the Philippines comes the report of women pharmacists and engineering graduates "who apply for work as operators of weaving, spinning, dyeing, and finishing machines in the textile mills," and of "lawyers who want to work even as security guards and watchmen just so they will earn something."[8] The Indian Minister of Scientific Research has noted that, although the best Indian scientists and engineers are on a par with those of other countries, Indians "lack competent foremen, chargemen, and supervisors in sufficient numbers."[9] The Indonesian Minister of Education recently announced a shift in emphasis "from general education to vocational education" for his country; that is, a greater stress on middle-level technical and semi-professional curriculums, away from the classical-traditional secondary-school curriculums oriented

[7] *Indonesian Observer*, February 4, 1959, p. 4; April 18, 1959, p. 2; *Antara Daily News Bulletin*, August 6, 1959, p. 4; and Massachusetts Institute of Technology, Center for International Studies, *STANVAC in Indonesia* (National Planning Association Series on United States Business Performance Abroad, No. 6 [Washington, D. C.: The Association, 1957]), pp. 77–78.

[8] *Philippines Free Press*, March 28, 1959, p. 69.

[9] *The Hindu Weekly Review*, February 16, 1959, p. 7.

toward verbal specialization in the university. It "is worth noting," he declared, "that unemployment among graduates of secondary and higher-grade schools is prevailing at present, in contrast to the [increasing demand for] vocational trainees."[10]

Unfortunately, persuading the Southeast Asian to take up middle-level vocational training runs counter to two potent educational traditions: the anti-utilitarian image of education and what might be called the "title cult." The educated person's aversion to doing manual labor of any kind, however specialized and technical, has been remarked upon by observers of the Southeast Asian scene too often to require much comment here: the cleric-literatus, whether in traditional or modern garb, whether a colonial or a national civil servant, just does not work with his hands. Out of necessity, a pharmacist may become a textile-dyer or a lawyer may become a guard or a clerk, but the achieved status symbolized by their academic diplomas is not touched by this: one simply does what one does because "times are bad." But deliberately to choose as an educational objective the vocation of skilled metalworker, machinist, or electrician—that is another matter. Experience in the colonial period in Indonesia, for example, demonstrates the failure of vocational education because, despite wide employment opportunities, graduates of secondary curriculums in forestry, metallurgy, or mechanics believed themselves too important to be employed as workmen.[11] What these graduates wanted was some kind of position of administrative authority in which actual application of the learned skills was unnecessary. In the Philippines today, there are indications that good vocational training is sadly lagging, in spite of the tremendous mushrooming of schools of all types:

> A foreign firm we know is in the market for good vocationally trained young men. This company . . . seldom finds the kind of workers it wants. Most of those who apply—though they come from vocational schools—are either lazy, unwilling to learn or simply ill-prepared. There's only one vocational school in the country, the manager said, that turns out really good mechanics, machinists, shop helpers, etc.[12]

Intermediate vocational training, however remunerative, also lacks the prestige of higher academic training expressed by the university degree. Since the origin and extent of the "title cult" in Indonesia have been described elsewhere,[13] suffice it to note here that attainment of an

[10] *The Indonesian Spectator* (Djakarta), February 1, 1959, p. 7.

[11] A.D.A. de Kat Angelino, *Colonial Policy* (Chicago: University of Chicago Press, 1931), Vol. II, pp. 236–38. Mr. Angelino was director of the Educational Department in colonial Indonesia. There is a parallel in the attitude of Indian students. Notwithstanding acute unemployment in many graduate categories, and although Indian village-development schemes require many types of trained personnel, Indian graduates are reluctant to take up residence in the villages, away from the amenities of towns and cities. Cf. Jyoti Singh, "Graduate Unemployment—Its Effects on University Life in India," *The Student*, III (September-October, 1959), p. 16. A recent report criticizes Asian students of agricultural economics "for a lack of a concept of service to rural people, and a lack of respect for the dignity and worth of farm life, labor, and especially farm people." Cf. Clifton R. Wharton, *The U. S. Graduate Training of Asian Agricultural Economists* (New York: Council on Economic and Cultural Affairs, 1959), p. 9.

[12] *Philippines Free Press*, March 28, 1959, p. 69.

[13] Justus M. van der Kroef, "The Cult of the Doctor: An Indonesian Variant," *Journal of Educational Sociology*, XXXII (April, 1959), pp. 381–91.

academic title has come to be regarded as virtually indispensable for those seeking to rise in status, particularly for those who want to climb by way of the enormously expanded government bureaucracies. It really matters little in what field the degree is taken (the popularity of a law degree lies largely in the comparative ease with which it can be obtained as well as in the presumed general-education value of law training), so long as one may place the coveted letters with one's name. To meet this demand, schools have rapidly multiplied, standards have been endangered, and fly-by-night institutions have preyed on gullible academic status-seekers.

IN INDONESIA, the pressure to increase the number of successful candidates passing various examinations has grown greatly, concomitantly with the problem of inferior, fraudulent, and one-man "universities," which do a lively business despite periodic government measures taken to control them.[14] The successful attainment of national independence by the countries of Southeast Asia has greatly augmented this trend, not least as a reaction to the restrictive and highly selective character of colonial education. The noble ideal of an education for every citizen, embodied in nationalist ideology, has tended to encourage the belief that everyone, qualified or not, is entitled to an academic degree with which to advance in the social scale—creating a problem not peculiar to Southeast Asia. The use of influence and bribes to gain admission to the universities has occasioned a number of scandals. "There is a widespread belief among students all over India," a perceptive Indian observer notes, "that admission to colleges and universities is based on nepotism."[15] That this belief may not be altogether without some foundation in fact becomes apparent from the following Indian press report:

> . . . Mr. C. D. Deshmukh, Chairman of the University Grants Commission, deplored the tendency among some State Governments to interfere with the admission of students into engineering colleges and technical institutions and said this would lead to disastrous results.
>
> . . . Mr. Deshmukh . . . said it was alarming to find students of obviously inferior calibre being admitted into engineering colleges under political pressure or as a result of undue influence and an exaggerated desire to give everyone a chance. He was aware of cases where Vice-Chancellors and Principals of engineering colleges in some States had been "unceremoniously hustled or browbeaten by some State Governments" into accepting inferior material, that was to say . . . students who would take ten years or more before they could be molded into qualified engineers.[16]

Conditions such as these would not be so disquieting if the influx of students into engineering also betokened a widespread desire on the part of the individual to apply his technical skills in the development of the economy. Unfortunately, this is not necessarily the case. For reasons which

[14] *Ibid.*, pp. 383, 388; and J. M. van der Kroef, "Social Dysfunctions of Indonesian Education," *Comparative Education Review*, II (October, 1958), p. 18.

[15] *The Hindu Weekly Review*, February 2, 1959, p. 11.

[16] *Ibid.*, January 5, 1959, p. 16.

also have to do with the planning ideologies in Southeast Asian countries, the engineering, law, or business-administration graduate prefers either semibureaucratic employment in national or local governments or work in a vested monopoly or large corporation (frequently of foreign origin) where he, like his organization-minded counterpart in the United States, can advance through the administrative hierarchy. To strike out on one's own in entrepreneurial fashion, or to attempt to make an individual contribution to the underdeveloped economy of one's nation on the basis of special skills, is comparatively rare. The academic degree, even when earned in an eminently practical field such as engineering, tends to be conceived in non-utilitarian terms; it denotes, first of all, the bearer's right—in the traditional, aristocratic sense—to a leisurely enjoyment of the emoluments of his status. Moreover, the very expansion of national bureaucracies and the anxiety of Southeast Asian states to see their citizens placed in positions of prestige in various international organizations such as the United Nations have tended to force the few available specialists even further into comparatively non-utilitarian, bureaucratic occupations. The consequence is perhaps best illustrated by Indonesia, where technical specialists are as often as not bureau chiefs or delegates to international commissions, while the domestic social economy flounders for want of application of their special knowledge.

IN ADDITION to the oversupply of graduates in certain professional fields, the disinclination to take up certain kinds of employment, nepotism and political pressure, and highly intensified status ambitions, another factor complicates the problem of the educated unemployed, namely, the effect of collectivist-planning ideologies current in much of Southeast Asia. This is not the place to review theories of economic development in India and Indonesia; it is enough to say that in these theories some kind of balance is envisaged between private enterprise and extensive state ownership and control, with a heavy emphasis on the benefits of the socialistic welfare state. Hostility to the concepts of capitalism and individual enterprise varies with the country, but its presence—perhaps one should say its ideological dominance—is unmistakable. The problem of the educated unemployed is directly aggravated by this because, on the one hand, private initiative and entrepreneurship are deprecated, and, on the other, all eyes are turned to the omnipotent state for the enlarging of employment opportunities. The Indian Minister of Education recently declared that although university admissions procedures would be made more restrictive in the future and, as a result, a larger number of students would have to be content with secondary education, a "Welfare State" still has "a responsibility to find suitable jobs for these students."[17] In Indonesia, the ever increasing pressure of high-school and college graduates on the swollen national bureaucracy has created a situation in which "the bureaucracy and the educational system [also enormously expanded] are locked in a self-perpetuating circle of distension

[17] *Ibid.*, August 3, 1959, p. 16.

in which the second produces more and more diplomaed graduates which the latter is forced to absorb."[18] That the nation state has the obligation to provide employment opportunities has come to be expected almost as a matter of course among many Indians. An American-educated Indian student who recently analyzed the "seething discontent among Indian students who have returned from abroad" and cannot find adequate employment frankly warned what a government should expect if it is unable to provide suitable jobs: "The conclusion seems inescapable that unless and until the government of an underdeveloped country devises comprehensive schemes to exploit all trained human resources every individual national is morally free to seek the fulfillment of his education in any part of the world."[19]

The feelings of the educated Indian toward his nation are placed in a somewhat unusual light by this statement. In Indonesia, meanwhile, a seemingly semi-permanent status as "student" appears to be regarded as a convenient limbo by those who are not of a mind to finish their education and are unwilling to attempt a career under the present adverse economic conditions. When the Indonesian Education Ministry, in an "effort to safeguard students from outside anarchist influences" (a euphemism for an attempt to rid student bodies of the influence of overaged, unstudious hotheads), announced that all students who were over nineteen or married would be barred from government high schools, a storm of protest arose among student groups with a high degree of political consciousness, and the issue at present is still in doubt.[20] The disinclination to link educational achievement with an individual obligation to use one's training in the national society, even though it involves hardships, thus not only increases the number of educated unemployed but also hampers the deployment of the very forces of economic development which alone could significantly contribute to the alleviation of unemployment.

In the Philippines, possibly because of United States influence, these conditions do not obtain to the same degree. However, the insidious evils of nepotism in job procurement are perhaps greater there than anywhere else in Southeast Asia. The oligopolistic Philippine economy does not invite the young graduate to try his luck, even in the large undeveloped southern parts of the country. Instead, the wasteful and fraud-inviting process of *padronismo* (personal influence–soliciting) holds sway in a measure understandable only in terms of the gravity of the educated-unemployed problem in the sluggish Philippine economy. A report by a Philippine journalist is revealing:

> . . . no fewer than half a dozen parents—friends of ours—have come to us during the last couple of weeks and requested us to help their

[18]Clifford Geertz, *The Development of the Javanese Economy: A Socio-cultural Approach* (Cambridge, Massachusetts: Massachusetts Institute of Technology, Center for International Studies, 1956), p. 72. On September 23, 1959, the Djakarta daily *Indonesian Observer* editorially expressed its concern over the growing number of unemployed high-school graduates and the emergence "of a new class in the country, the class of intellectual proletarians."

[19]Usha Paranjpe, *ibid.*, pp. 5, 6.

[20]*Indonesian Observer*, April 24, 1959, p. 2.

> sons and daughters—who have just graduated from college—to find employment.
>
> But if there's any group of people who are being swamped these days with requests for letters of recommendation to government offices, business establishments, industrial plants and various other firms, it is the members of Congress. At a recent informal party in the house of a mutual friend, a congressman told us of the "unusually big number" of young college and high school graduates who have been making a bee-line to his office. . . . "Approximately how many job-seekers among high school and college graduates request letters of recommendation daily?", we inquired. "An average of 50," was his quick reply . . . .
>
> A Visayan congressman . . . had this to say: "Believe it or not, one fourth of my entire time, during weekdays, is spent in contacting government and private offices to see if there are jobs available." . . . Confessed a bureau director to this writer: "To tell you frankly, I sometimes do not feel like reporting to work during office hours because of so many telephone calls from members of Congress, asking me to 'accommodate' their recommendees because they [the lawmakers] are 'personally interested' in the applicants . . . ."[21]

THUS the better-educated segment of the Southeast Asian population may be far from accomplishing that dynamic breakthrough to entrepreneurial innovation or advancement in the professions which the region so badly requires. The skills learned abroad, thanks to many educational-exchange opportunities and scholarships, which in the United States alone have brought hundreds of Southeast Asians in touch with modern academic training, are also often doomed to remain unused or to wither away. Recently an Indonesian newspaper charged, for example, that Indonesian students returning from abroad are shunted aside to a "forgotten corner" in the bureaucratic structure, in which "Neanderthal-minded bureau chiefs" ensnarl all use of new talent in red tape.[22] Yet it is the government, encouraged by foreign educational foundations, which has sent and keeps sending these student officials out in the first place, and it is to government service that they return. Then, too, lack of funds and facilities frustrates the returning scientist, who is unable to keep up with developments in his field. The Useems, in their study of the Western-educated male in India, have given striking examples of this.[23]

A solution of the problem of the educated unemployed lies, then, not only in the direction of a more balanced over-all development of the social economy of the country concerned. Perhaps more significant is a needed shift in educational values and objectives, and a liberalization in the application of acquired skills, both based on a more individualistic rationale and kept outside the stifling confines of collectivistic-planning ideology and state control.

[21] *Philippines Free Press*, March 28, 1959, pp. 4, 65.
[22] *Antara Daily News Bulletin*, July 20, 1959, p. 4.
[23] John Useem and Ruth Hill Useem, *The Western-educated Man in India: A Study of His Social Roles and Influence* (New York: Dryden Press, 1955), p. 219.

In Lieu of Money

The Rewards of Teaching

By Robert L. Tyler

A NEW voice in the great educational debate has said that teachers are recruited from among either the dedicated or the incompetent. The remark, of course, is a variant of the older adage that people who can, do, and those who cannot, teach. Both the original and the variant are, to be sure, only half-truths at best. A student named Jay, who smelled of manure and spouted outrageous opinions like a soapbox orator, taught me that teaching can indeed have rewards not measured in money but, on the other hand, not requiring the kind of saintly commitment suggested by the word *dedication*. My lesson from Jay did not put steak on my table instead of hamburger or pay off a desk drawerful of pediatrician's bills, but it did convince me that I had stumbled into the right occupation. At the time, I needed convincing. I had encountered nothing to stir dedication, and I was not resigned to an admission of incompetence. As a young college history instructor, I had awakened to the brute fact that after eight long and expensive years of college training, I was earning less money than a shoe salesman. What was even worse, the future did not promise much advancement. In that year, all college professors received a national average income about equal to the average family income of the nation as a whole. I had heard that teaching compensated for proverbial low pay and status with such advantages as job satisfaction, long vacations, and low-pressure working conditions. But I was dubious—until Jay came along.

I first met him as a "problem" student. He had enrolled for a survey course in Western Civilization that I was teaching at the urban night-school division of a large state university. He was not a "reading problem" or an "underachiever," or even a "discipline problem," at least in any usual meaning of the jargon. He was a problem because he stood out in the class like a warty nose and because he threw himself with such abandon into class discussions that he antagonized everybody in the class, including me. He was a tall, bony youth in his early twenties, several years older than the other freshman students. He had a great shock of explosive black hair, and for the twelve weeks of the course he did not consult a barber about it. He wore soiled blue denim trousers and an equally dirty and rumpled blue denim jacket. He talked in loud, booming, rural tones, the kind of speech that vaudeville farmers

Robert L. Tyler *is an assistant professor in the Social Science Department at Ball State Teachers College.*

spoke and that has supposedly disappeared in our day of Hollywood movies, television, and radio.

When I saw him sitting in the front row of the classroom on the first evening of the class, a few idle questions entered my mind. A mere glance was enough to persuade me that I had an eccentric of some kind under my nose. Before the first class meeting was over, more urgent and disturbing questions raced through my mind. I had anxious misgivings about his gaunt presence there in the first row of seats. I wondered how I was going to bear up under his eager stare for three months, his avid headshaking in agreement or disagreement with all my remarks, and his loud voice breaking into my lecture with no advance warning like a bulldozer. I was not an old hand at conducting a college class from the low raised dais and from behind the imposing lectern. I was certainly not dedicated. But as events proved, that first evening with Jay, bad as it had seemed, was my easiest. Jay had only been warming up.

FOR the second long meeting of this weekly class I came prepared to lecture with wit and learning on the liberal and national revolutions in post-Napoleonic Europe. I had marked my voluminous, anxious lecture notes like the orchestration for a jazz band. At appropriate, seemingly controversial points I had allowed a break for improvisations and class debate. But in my limited experience I had already learned that these hopeful breaks for discussion were often disappointing.

"Why, do you think, such and such led to such and such?" was the form my probings sometimes took. I would pause and wait, poised for the storm of heated opinion. Nothing would happen. Gaping young faces would stare up at me courteously, waiting for me to resume their "education," waiting for me to continue the talk they had paid for. I would then rephrase my question, perhaps in exasperation making it outrageously provocative, suggesting that Lincoln had really been a tyrant deserving assassination at the hands of a Brutus or that absolute monarchies were better governments than democracies. Still nothing would happen. Still the same polite, waiting faces. I then understood why some teachers adopted a perpetual iconoclastic pose—anything to stir up excitement and to agitate torpid gray cells.

But in this class, with Jay, I had no such disappointment in the response to my leading questions. Jay rose to my bait. He boomed out even more outrageous assertions than I would ever have dared to make. The class took fire also. Everybody got very angry. Voices were raised. I had never participated in a discussion, in or out of school, that had reached the shouting stage so quickly. It took more than my scant abilities to keep the discussion on the level of minimal courtesy. I never got the chance, of course, to finish my carefully prepared lecture on the liberal and national movements of the early nineteenth century. In fact, I was able to say very little all evening except for a series of futile "Now, let's . . . " or "Perhaps we can . . . " or "Shall we look

at the . . . ?" As I plunked my books and notes into my imitation-leather brief case after class, I was exhausted and angry. The twelve weeks of the course yawned ahead of me like a vista of years. I realized that I had a real primitive on my hands. Jay was obviously bright and enormously interested, but he was a complete savage and boor. What was worse, I had no good ideas about how to tame him. I thought wearily only of survival.

I did not even escape Jay after class. When I went down the street for a cup of coffee before driving home, he was in the café. I would have retreated hastily, postponing coffee till I got home, had I seen him in time. But I had seated myself in a booth and given my order before I spotted him sitting nearby at the counter. At once he rushed over and sat down opposite me without waiting for an invitation.

"Say, I really enjoyed that class," he roared, causing half a dozen persons in the café to crane their necks to watch us.

"I could tell," I answered quietly, trying dismally to set an example.

"Yes sir, I'm really going to enjoy that class."

I thought such a refrain could go on indefinitely. I tried to steer the conversation to him. I was curious about him in spite of myself, in spite of my irritation and vague embarrassment.

"Are you working toward a degree?" I asked, dragging an obvious and polite question out of the air.

For the next half-hour I got the answer to my question and to many others I did not have the opportunity to ask. Jay was an orphan who had been reared by a reluctant uncle—I could commiserate with that uncle—on a submarginal farm. He had had a hard life. Ever since he could remember, though, he had read books, hundreds of them. As he talked, I could picture him upon some bunch-grass moor devouring Dickens, Carlyle, the Harvard Classics, the Bible, anything and everything he could find in his uncle's clapboard house, the traveling rural library, or at more cultured neighbors' houses. His uncle had not been happy with him, but Jay only hinted at the problems he had encountered in his foster home. Somehow Jay had finished high school, even though he had been forced to leave home to do so. As a nineteen-year-old, he had lived alone in the city. He had received some small help from remote relatives, and he had worked at an incredible variety of part-time jobs. He had been completely unsocial in high school, leaving for his job or his rooming house as soon as the afternoon bell rang. He was working for a college degree through "Extension" and was worrying about how he would ever be able to fulfill the state university's residence requirements for a degree. Only two years of night-school credit could be transferred toward the degree. I learned that he had found a job as a laborer on a dairy farm about twenty miles outside the city. Three nights a week he came into the city to go to school. He never had time to change his clothes. I was pleased to have the blue denims and the smell of manure explained.

I LEARNED a lot about Jay that evening in the café. I was better able to understand his complete lack of the social graces. But I did not learn very much about his convictions and opinions. I learned about them during the next meeting of the class.

After I had polished off a few of the "isms" of the early 1800's, hurrying to compensate for lost time and feeling that I was making a botch of the whole thing, I finally got to Karl Marx. Then Jay blossomed out again as he had the previous week. But what had gone before in my classroom had been prompted by Jay's less strongly held opinions. Now he took over the floor completely. He explained and defended the *Communist Manifesto*, part of that week's assigned readings, almost point by point. He even stood up and faced the class and began to read the thing sentence by sentence, with exegesis. The rest of the class rose up in arms and challenged him, point by point. Jay, however, lectured and cajoled them and orated with a grand sweeping of his arms. He completely ignored my remonstrances, my really loud, angry, almost rude orders to shut up. He plowed ahead, pulling down ancient sacrosanct institutions. The church and organized religion dispensed tranquilizers. The American family, so sacred to television, was really only a blind for "male chauvinism" and "bourgeois prostitution." The Constitution was a mask for ruthless exploitation. Before we were all saved by the bell, he had aroused everyone in the class. They almost stood on their desks to scream at him. From the platform I tried vainly to moderate the meeting, to insist upon common-sense qualifications, in between periodic attempts to get everyone to shut up completely.

It took me some time to get out of the classroom that evening. I was surrounded by angry adolescents threatening to withdraw from the course, threatening bodily injury to Jay. I thought I could understand Jay a little better than most of his outraged peers. Knowing something of his life, I could see the utter bookishness of his opinions and understand why, in his bitter and impoverished experience, they seemed such good opinions. But I could not explain all that to the students. Besides, I was angry at Jay myself.

After the class, I saw him again in the café. I had the feeling he had been waiting there for me. He had hurried out of the classroom after the bell, leaving arguments hanging in the air. We had a conversation that lasted for almost two hours and through many cups of coffee.

"That was sure a fine class tonight," he said, as he barged into my booth again without invitation.

Because I could hardly agree with him, I only looked at him wearily and grunted.

"You don't have to cover up to me," he said. Again I could see the necks bending all over the café. "You've got the dope, I know. I can tell. I'm not going to snitch on you to the FBI." He roared with laughter. "By golly, that was a good class. I sure like to talk about those things."

I took the bull (figuratively?) by the horns. "First of all," I said grimly, "don't shout!"

"Shout?" he shouted, "Who's shouting?"

For half an hour or more we talked frankly about ordinary social usage, about its practicality, its rationale, its genesis, perhaps, in chivalry and feudalism, its place in the "class struggle," its current sociological implications, everything. I told him exactly how the rest of the class had reacted to his display and explained as simply as I could, cutting through the philosophical delaying actions, how he might proceed to change the situation.

For awhile I thought I had crushed him. Then, for a briefer moment, I thought I might have to fight him—or call a policeman. But before it was all over, he had quieted down and was volleying questions at me. In some ways, they were questions an interested six-year-old might have asked. He wanted briefing on the most elementary etiquette. Our talk for the rest of the evening was largely unacademic.

AT THE next meeting of the class, Jay surprised me and everyone else. For one thing, he waited a long time before volunteering to speak, and then he raised his hand first. He turned in his seat and apologized to the grim-faced and expectant students sitting behind him.

"I'm sorry I riled you up so much last time. But I'm still right. The Prof thinks I'm right too."

I felt a flash of annoyance at his presumption in speaking my mind for me. But I recognized my cue. Instead of shouting, as seemed to be the practice in my classroom, I set out on a long explanation of Marxism and its importance in modern history. I explained in an elementary way the many sects and denominations that claimed descent from the Marxist scriptures and what the lasting value of Marxism seemed to me to be in modern thought.

Jay looked crestfallen. He actually sulked through the rest of the long class period. After class, in the café again, he accused me of having no "guts." "Are you afraid of McCarthy?" he asked. That evening's conversation was almost entirely academic. Jay, I was sure, crept back to his bunk at the dairy farm with his world shaking. But I hoped that something had been said during the evening, some ideas or hints of ideas exchanged, which would help him in the rebuilding of his foundations, even if they continued to be Marxist.

The remainder of the course passed more quietly, although Jay occasionally forgot himself in brief, wild enthusiasms. I had several more long talks with him over coffee in the café. Instead of debating the *Manifesto*, point by point, we branched out to discuss other books and other thinkers. Jay was a voracious reader. Because he had practically no social life, he raced through twenty or more big, important books before the course was over—Freud, Spengler, Kant, Wittgenstein, and others. He was only beginning to recognize shadings, qualifications, and rhetorically skirted

problems. Then sometimes he would break off a criticism of logical empiricism to ask me some pathetic, practical question, prompted, I suspected, by some event in his daily life. "How do you ask a girl for a date?" or "How do you talk to a girl?"

The term finally ended. Jay gave me an effusive good-by when he came to my desk to turn in his final examination paper. I gave him a grin and said good-by, wishing him luck in his plans.

I DID not see him again for over a year. Then, after another evening class, I met him in the same café. At first I did not recognize him. His hair was cropped in a trim crew cut. He was wearing gabardine slacks, shiny brown shoes, and an overly gaudy sports shirt. He did not even give off an odor, unless it was the ever so faint odor of shaving lotion.

"Prof!" he said, "I'm glad to see you again. Can I sit down?"

I said he could sit down. I told him that I could hardly recognize him. He explained that he had long since given up the dairy-farm work and had found a job in the city as a warehouseman. He had a scholarship to attend the university, on the home campus, the following year. He was going to major in philosophy, he told me. He hoped to be able to get further assistance so that he could go on to graduate school, because he intended to become a college professor. "It's the best life," he said. "Look at those long summer vacations." He winked at me when he said that, and there was an enormous amount of communication in the wink. I suddenly realized that he was crediting me with a great deal.

I asked him how everything else was going.

"It's the girls," he said. "I've got to keep myself single, you know, for a couple of years. But I'm getting more life-adjusted every day."

"Well, don't carry it too far," I said.

"Say, Prof, do you know Camus? He's got something. He's pretty well convinced me that life's absurd."

We were off again. At first I wanted to apply the brakes and get back to his educational objectives. He was pretty naïve. He needed to learn the facts about salaries, campus politics, status snobberies in the profession, and things like that. But then I had a few ideas of my own on Camus.

Some Principles and Problems of Selective College Admissions

Should Entrance Requirements Be Raised?

By RALPH F. BERDIE

AS THE number of high-school graduates mounts and colleges are increasingly faced with more qualified applicants than they can admit, the problem of selective admissions becomes greater and more important. One way of meeting it is to increase selectivity. Raising entrance requirements serves the double purpose of limiting enrollments and changing the nature of the student body.

Two types of question must be considered in any discussion of selective admissions. The first type concerns the kinds and numbers of students to be admitted, the probable rates of success of these students, and the effects of admissions on size of enrollment. The second type concerns problems of values, such as the objectives of higher education, the kinds of students a university should educate, and the relative importance of society's needs for different sorts of trained citizens.

The figures which are reported in this paper suggest answers to the first type of question. Although they are generally useful in discussing the second type, the answers to which they lead are more or less dictated by the wishes and values of those who use them rather than the facts at hand. By restricting admission to young persons who graduated in the upper 10 per cent of their high-school classes, we could accelerate the academic program, teach more abstract and more complex information, and furnish graduate students with a greater fund of knowledge and a larger repertoire of intellectual skills. If we restricted our enrollment in this way, however, we would sharply limit the number of persons participating in the intellectual activities of the university, and consequently the number of educated persons available for occupations which do not require professional training at the college level, or which, although they demand university preparation, are not of an exacting nature. Society needs university graduates drawn from a broad range of abilities. With smaller enrollments, it is likely that we would also have a reduction of university resources and facilities. The available data suggest what effect changing the admissions standards would have on enrollments and academic success and failure; they cannot determine what the objectives of a university should be.

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The logic underlying selective admissions is obvious. We wish to accept students with the greatest probability of academic success and reject those with the greatest probability of failure. If predictive procedures were absolutely dependable, we should be able to select a point or a score below which all students would fail. Because of the limitations of predictive methods, however, some students above the critical point will fail, and some below succeed, regardless of where it is set. Consequently, we must find a point that will exclude a maximum of probable failures and a minimum of probable successes, and admit a minimum of failures and a maximum of successes. We must also leave the way open, in special cases, to admitting students who do not meet the standards.

TABLE I

RELATIONSHIP OF HIGH-SCHOOL RANK AND FIRST-YEAR GRADE AVERAGES OF 470 MALE FRESHMEN IN THE COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

HIGH-SCHOOL PERCENTILE	NUMBER OF STUDENTS			
	Below *C*	*C* to below *B*	*B* and above	Total
(1)	(2)	(3)	(4)	(5)
90–100	17	101	68	186
80– 89	31	70	11	112
70– 79	30	33	8	71
60– 69	39	17	1	57
50– 59	13	11	1	25
40– 49	10	3	...	13
30– 39	4	...	...	4
20– 29	1	...	...	1
10– 19	1	...	...	1
1– 9	...	...	...	...
Total	146	235	89	470

Without much difficulty we can establish a low point below which most persons will fail that will exclude few successful persons; but above this point, many failures will also be found. Similarly, a high point can be established above which most persons will succeed, and below which many successful persons will be found. Thus, if the point is too high, we seriously restrict the number of persons who will succeed, even though we greatly reduce the number of failures.

THE probable consequences of increasing admissions standards in the College of Science, Literature, and the Arts and the Institute of Technology of the University of Minnesota are indicated in Tables I–VII. Since 1923, the most efficient predictors of academic success at the University have been the student's score on a college-aptitude test and his percentile rank in his high-school graduating class.[1] The former provides an estimate of the student's academic ability; the latter, a picture of past academic achievement as related to ability and motivation.

[1]Ralph F. Berdie *et al.*, *Counseling and the Use of Tests* (Minneapolis: University of Minnesota Student Counseling Bureau, 1959), p. 87.

The data for students in the arts college were obtained from the entering class of 1954; those for students in the Institute, from the freshman classes of 1956 and 1957. Many surveys indicate that the student's academic aptitude remains relatively stable from year to year. Studies of grade distributions in the University in the past decade have revealed that the distribution of grades also remains relatively constant. The inferences drawn from these data are intended to describe the immediate situation and the situation that may exist during the next few years.

The grades earned by Freshmen during their first quarter in the University are the criterion of success. Studies have shown consistently that first-quarter grades are maintained with little variation throughout

TABLE II

RELATIONSHIP OF HIGH-SCHOOL RANK AND FIRST-YEAR GRADE AVERAGES OF 560 FEMALE FRESHMEN IN THE COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

HIGH-SCHOOL PERCENTILE	NUMBER OF STUDENTS			
	Below *C*	*C* to below *B*	*B* and above	Total
(1)	(2)	(3)	(4)	(5)
90–100	19	62	42	123
80– 89	22	54	16	92
70– 79	36	50	5	91
60– 69	47	33	5	85
50– 59	50	22	..	72
40– 49	36	16	2	54
30– 39	14	10	1	25
20– 29	10	1	..	11
10– 19	4	3	..	7
1– 9	..	..	..	..
Total	238	251	71	560

the first year of college, and a few studies have shown the consistency of academic achievement over longer periods of time.

Table I lists the high-school percentile ranks and the grade averages made in the academic year 1954–55 by 470 male Freshmen in the College of Science, Literature, and the Arts at the University of Minnesota. Of the total number of students in the study, 186 were in the upper 10 per cent of their high-school class. Of these, 17 received grade averages of below *C* in the University during their first quarter of registration, 101 between *C* and *B*, and 68 *B* or higher. None of the students with *B* averages or higher were in the lower half of their high-school graduating classes. However, 3 of the 13 students in the 40 to 50 percentile rank had averages higher than *C*. Only 6 of the 470 men admitted to the arts college had a high-school percentile rank below 40, and none of the 6 did satisfactory college work.

If the arts college had denied admission to students who were not in the upper 20 per cent of their high-school classes, only 298 (or 60 per cent) of the 470 students would have been admitted. Of the 89 superior

students, 10 would have been excluded. Of the 324 students who did satisfactory work during their first quarter at college, 74, or approximately 20 per cent, would not have been admitted. Of the 146 students who did unsatisfactory work, only 98 would have been excluded.

It is clear that if only a very select group were admitted on the basis of high-school percentile rank, the total enrollment of the college would be reduced drastically, as well as the proportion of failing students (provided that the grading standards were not changed); however, the number of satisfactory students would also be significantly reduced. If the admissions requirement were raised from the fortieth to the fiftieth percentile rank, a few additional failures would be eliminated, but a large number of successful students would also be refused admission.

TABLE III

RELATIONSHIP OF COLLEGE-APTITUDE RATINGS AND FIRST-YEAR GRADE AVERAGES OF 1,034 FRESHMEN IN THE COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS

COLLEGE-APTITUDE RATING	NUMBER OF STUDENTS			
	Below *C*	*C* to below *B*	*B* and above	Total
(1)	(2)	(3)	(4)	(5)
90–100	12	103	83	198
80– 89	42	101	32	175
70– 79	65	68	14	147
60– 69	66	86	15	167
50– 59	89	72	6	167
40– 49	101	48	7	156
30– 39	9	10	..	19
20– 29	1	3	..	4
10– 19	..	1	..	1
1– 9	..	..	..	..
Total	385	492	157	1,034

THE figures for the women in Table II are similar to those in Table I. Of the 560 women admitted in 1954–55, 123 were in the upper 10 per cent of their high-school classes: 42 of them had grades of *B* or higher; and only 19 failed to do satisfactory work. Of the 43 women from the lower 40 per cent of their high-school classes, 15 did better than satisfactory work, and one obtained a grade average higher than *B*. If the entrance requirements for women had been based entirely on high-school percentile rank and increased from 40 to 50, 54 of the women in the study would not have been admitted to college, but 18 of them would have been able to do satisfactory work. If admissions had been limited to women in the upper 20 per cent of their high-school classes, 345 of the 560 women would have been excluded; 148 of these would have been able to earn grade averages higher than *C* during their freshman year.

For many years admission to the arts college has been based on an average of high-school rank and percentile score on the College Aptitude Test. This average is called the College Aptitude Rating (CAR). The

minimum entrance requirement for the arts college is an average of 40, but each year a few students with CAR's lower than 40 are admitted through special action. Thus, in Table III, of the 1,034 students who entered in 1954, 24 had CAR's below 40. Of these, 14 did better than satisfactory work and 10 did less than satisfactory work. This suggests that exceptions are now being made wisely. If the present minimum requirement were raised from 40 to 50, 156 students falling in the fourth decile, and now regularly admitted, would be kept out of the college. More than one-third of these succeeded in doing satisfactory work, and 7 actually made averages higher than *B*.

If no students with CAR's below 70 had been admitted, the arts-college enrollment would have been reduced by more than one-half. Most of the superior students would have been admitted, but 28 of the 157 students with *B* averages or higher would have been excluded. A large proportion of the 385 failing students would have been excluded, but 119 of them would have been admitted. This high entrance requirement would have excluded 45 per cent of the students who earned grade averages between *C* and *B*. One might well ask those who advocate raising the entrance requirement whether it is not the responsibility of the university to educate this group.

TABLE IV

RELATIONSHIP OF HIGH-SCHOOL RANK AND FIRST-QUARTER HONOR-POINT RATIO OF 1,663 FRESHMEN IN THE INSTITUTE OF TECHNOLOGY

HIGH-SCHOOL RANK	NUMBER OF STUDENTS			
	Below *C*	*C* to below *B*	*B* and above	Total
(1)	(2)	(3)	(4)	(5)
90–100	117	292	162	571
80– 89	148	187	49	384
70– 79	129	116	27	272
60– 69	137	59	16	212
50– 59	101	37	4	142
0– 49	53	19	10	82
Total	685	710	268	1,663

If the CAR requirement had been raised from 40 to 50, the size of the freshman class would have been reduced by approximately 15 per cent, and, as a result, between 8 and 10 per cent of the successful (*C* average or higher) students would have been excluded.

TABLES IV–VI illustrate similar data for the Institute of Technology. Of 1,663 students admitted in 1956 and 1957, 82 came from the lower half of their high-school class. Since the entrance requirement in the Institute at that time was that students must come from the upper half, exceptions were made for them. Of the 82, 29 actually succeeded in doing better than satisfactory work during their freshman year, as compared with 53 who failed. Of the 571 students who came from the upper 10

per cent of their high-school class, 20 per cent failed, 51 per cent had averages between *C* and *B*, and 28 per cent had averages higher than *B*. Of students in the fifth decile of their high-school class—those with percentile ranks between 50 and 59—only 3 per cent had averages higher than *B*, but 26 per cent had averages between *C* and *B*. Seventy-one per cent of these students failed. If the admissions requirement had been increased from 50 to 60, 142 students would have been excluded, almost one-third of whom would have been able to do satisfactory work. If the admissions requirement in the Institute of Technology had been raised from a high-school percentile rank of 50 to 70, 436 students would have been excluded. Of these, 291 would have been failures, 115 would have made averages between *C* and *B* as Freshmen, and 30 would have earned averages higher than *B*. Thus the freshman enrollment in the

TABLE V

RELATIONSHIP OF MATHEMATICS TEST, FORM A, AND FIRST-QUARTER HONOR-POINT RATIO OF 930 FRESHMEN IN THE INSTITUTE OF TECHNOLOGY

MATHEMATICS-TEST CATEGORIES	NUMBER OF STUDENTS			
	Below *C*	*C* to below *B*	*B* and above	Total
(1)	(2)	(3)	(4)	(5)
90–100	127	166	86	379
80– 89	34	76	31	141
70– 79	36	63	25	124
60– 69	17	23	5	45
50– 59	23	16	5	44
40– 49	28	22	3	53
30– 39	21	9	1	31
20– 29	37	12	...	49
10– 19	18	5	1	24
1– 9	34	3	3	40
Total	375	395	160	930

Institute of Technology would have been reduced by approximately one-quarter, but the number of successful and superior students excluded would have been uncomfortably large. Simply raising the entrance requirement from 50 to 60 would have had essentially the same result.

The admissions requirements of the Institute of Technology were recently changed: a mathematics achievement test was incorporated, with a requirement that a student be in the upper half of his class. Tables V and VI show the relationship between scores on the mathematics test and freshman grades. Two forms of these tests were used: Table V presents results from Form A, Table VI from Form B. Of the 144 students who received scores below 40, only 5 made grade averages above *B*, and 29 made averages between *C* and *B*. Thus, if a minimum score of 40 had been used, 144 students would have been excluded from the Institute of Technology, 29 of whom would have been able to do satisfactory work. If the admissions standard had been 50 instead of 40, an additional 53 students would not have been admitted to the Institute

of Technology, approximately half of whom would have been able to do satisfactory work.

In general, the information in these tables shows conclusively that if entrance and admissions requirements were raised in the University of Minnesota College of Science, Literature, and the Arts and Institute of Technology, large numbers of students would be kept out of these colleges, among them a sizable number competent to do college work and able to maintain satisfactory or better than satisfactory averages during their freshman year.

IT IS apropos here to compare the results obtained in the arts college in 1954–55 with those obtained three decades ago, from 1923 to 1927. A brochure by J. B. Johnston presents tables comparable to the ones included here. A slight adjustment which has been made in them

TABLE VI

RELATIONSHIP OF MATHEMATICS TEST, FORM B, AND FIRST-QUARTER HONOR-POINT RATIO OF 929 FRESHMEN IN THE INSTITUTE OF TECHNOLOGY

MATHEMATICS-TEST CATEGORIES	NUMBER OF STUDENTS			
	Below *C*	*C* to below *B*	*B* and above	Total
(1)	(2)	(3)	(4)	(5)
90–100	36	80	74	190
80– 89	23	57	31	111
70– 79	32	42	14	88
60– 69	41	49	7	97
50– 59	31	45	5	81
40– 49	46	32	4	82
30– 39	46	32	4	82
20– 29	43	31	3	77
10– 19	40	11	2	53
1– 9	50	17	1	68
Total	388	396	145	929

because of a difference of one in the class intervals does not impair the comparison. Table VII presents the number of students in the arts college, 1923–27 and 1954–55, with college-aptitude ratings in each decile; the number of students in each decile who did satisfactory work during the freshman year as shown by grade averages of *C* or higher; and the percentage of students in each decile who did satisfactory work. In 1923–27, of students with college-aptitude ratings between 90 and 100, 94 per cent succeeded in their freshman year, and the same per cent within this CAR group succeeded in 1954–55. In the next decile, 80–89, the figures are almost identical. Roughly, in the percentile rating of 70–79, the figures are similar. After that point, we find that the percentage of students in 1954–55 who did successful work begins to exceed the matched figure for the earlier years. In general, in 1923–27, only 41 per cent of the entering Freshmen did satisfactory work; in 1954–55, the per cent was 63.

When one examines the first few columns of Table VII, the explanation of the findings becomes quite obvious. The group for the earlier years contains approximately twice as many students as the later group. In the lower 30 per cent during the earlier years were 356 students, as compared with 5 during the later years. Practically all of the 356 students of 1923–27 failed. The reduced failure rate in the arts college over the long period of time between 1927 and 1954 was apparently due primarily to the exclusion of large numbers of students with low ability who were almost doomed to fail. Students with relatively low ability who are admitted to the college today are much more likely to succeed than they were in the past. Again, this suggests that the selection

TABLE VII

ACADEMIC SUCCESS OF FRESHMEN IN EACH CAR CATEGORY WHO ENTERED THE COLLEGE OF SCIENCE, LITERATURE, AND THE ARTS, 1923–27* AND 1954–55

College-Aptitude Rating	Number of Students		Number Doing Satisfactory College Work		Per Cent Doing Satisfactory College Work	
	1923–27	1954–55	1923–27	1954–55	1923–27	1954–55
(1)	(2)	(3)	(4)	(5)	(6)	(7)
90–100	213	198	201	186	94	94
80– 89	291	175	219	133	75	76
70– 79	260	147	158	82	61	56
60– 69	275	167	123	101	45	60
50– 59	294	167	102	78	35	47
40– 49	270	156	54	55	20	35
30– 39	253	19	32	10	13	53
20– 29	166	4	7	3	4	75
10– 19	132	1	2	1	2	100
1– 9	58	..	..	..	..	..
Total	2,212	1,034	898	649	41	63

*Adapted from Table II (p. 21), in J. B. Johnston, *Who Should Go to College* (Minneapolis: University of Minnesota Press, 1930). Slight adjustments have been made because class intervals different from those in the original table have been used.

currently being made at these levels is careful and wise. One might interpret the similarity of the figures at the upper range of the CAR distribution as indicating that the academic standards of the college have remained fairly constant over the period of years covered in the table.

Estimates comparable to those made at the University of Minnesota are available from the University of Wisconsin.[2] If the students who graduated there in 1957 had been selected exclusively from the upper 30 per cent of their high-school classes, 125, or 21 per cent, of them would never have been admitted. Restricting entrance to the top 40 per cent of the high-school classes would have eliminated 57, or 10 per cent, of the 1957 graduating class. At this level, 503, or 27 per cent, of the freshman class in 1953 would have been barred. Of these students, 57, or 14 per cent, eventually graduated.

[2]J. K. Little, "The Persistence of Academically Talented Youth in University Studies," *Educational Record*, XL (July, 1959), pp. 237–41.

Many persons who suggest that the admissions standards be raised are not aware of the limitations of methods for predicting academic success. When high-school percentile ranks, college-aptitude tests, and mathematics-achievement tests are used, a fairly effective job can be done at the extremes—particularly at the lower extreme—and large numbers of students at the bottom can be identified who in all probability would not succeed. However, as we approach the middle ranges on these measurements, where we are less able to make accurate predictions, raising admissions requirements would result in a great increase in the error of prediction. In other words, as the admissions standards are raised, an increasing number of students who would succeed will be rejected.

THE data presented here clearly indicate that success and failure rates can be altered by changing admissions requirements, and thus that it is possible to establish requirements that will eliminate most poor students. These same requirements, however, will also eliminate many good students. The first step in establishing admissions requirements is to observe the predictable outcomes of differing standards. What proportion of predicted successes fail, what proportion of predicted failures succeed? The next step is to decide what type of balance is desirable. The decision that is made will depend upon our attitudes toward the social and personal consequences of applying a given standard in regulating admissions.

Colleges and universities are needed to train and to educate different kinds of persons. Some institutions serve a useful social purpose by providing service to students in the lower-ability ranges. Others perform an important function by educating students at the higher level of the distribution. Many institutions make adequate provision for students with abilities covering a broad range. Selecting the students to be served is the joint prerogative of the college, those who support the college, and the community in which the college functions. The purposes and objectives of the college should be carefully discussed by these groups before changes in admissions requirements are made.

Professors and Students in European Universities

Observations of an American College President

By James A. McCain

THE enormous prestige enjoyed by the professor in Europe, in contrast to the lowly status of his American colleague, is a striking characteristic of European higher education. One encounters repeated evidence of this prestige. To hold professors up to ridicule—a common practice in this country—is simply unthinkable (a businessman in Rome assured me, "There are no eggheads in Italy!"). On the contrary, professors not only run their respective universities but, it is only a slight exaggeration to say, they run their countries as well. For throughout the European governments one finds professors in disproportionate numbers occupying the highest positions of leadership, serving as presidents, premiers, and cabinet ministers.

Nowhere does the adulation of the professor soar to greater heights than in the German-speaking countries. "In Austria, professors are not human beings, they are gods," according to an engineer I met in Vienna. And an American chemist who recently completed a year's study at Tübingen discovered that whereas in our country the university serves the student, "in Germany the university serves primarily the professor." A public-opinion poll conducted three years ago by a Hamburg newspaper revealed that professors rank above the members of all other learned occupations in the respect accorded them by the man on the street in Germany. It is significant that the past President of the West German Republic, Theodor Heuss, and the brilliant Economics Minister, Ludwig Erhardt, are professors; and perhaps it is even more significant that although both can legitimately use several impressive titles, they insist on being designated as "Professor," since in prestige this title considerably outranks all the others. The German professor is invariably addressed as "Herr Professor Dr." (the doctor definitely subordinate to the "professor"), and his wife shares his distinction as "Frau Professor."

But such accolades are by no means restricted to a few countries. Wherever I traveled in Europe, I discovered that the title "professor" earned me exceptional deference from taxi drivers, hotel functionaries, farmers, and businessmen. One encounters this abnormal respect for

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professors in unexpected places. For example, the sumptuous printed program for the 1957 Athens Festival carried a full-page advertisement for the Commercial Bank of Greece across the bottom of which it was proclaimed, in large boldface type, that the chairman of the board and general manager was *Professor* Stratis G. Andreadis. (The uncomfortable thought occurred to me that depositors might be panicked into starting a run on an American bank if they suddenly discovered that its management had been turned over to a college professor.)

THE elaborate procedures employed in the appointment of a professor are further evidence of the importance the public attaches to this post. In most European countries it is customary, in fact mandatory, to make a public announcement of each vacancy and invite applications for it. Even in those frequent instances in which some scholar of unusual distinction is almost certain to receive the appointment, the vacancy is advertised in order to assure all interested and qualified persons the opportunity of becoming candidates and receiving fair consideration.

Meticulous care and remarkable objectivity are used in evaluating each candidate for a professorship and ranking the candidates in order of qualification. This is done by a selection committee consisting of experts in the appropriate discipline. In some countries this committee is drawn from the faculty of the university where the vacancy exists; elsewhere, the committees are national bodies assembled by the ministry of education from several different universities. Occasionally, as in Norway, celebrated professors from foreign universities are summoned to serve on selection committees. Scholarly productivity as reflected in publications takes priority over all other qualifications. It is not uncommon for the committee to interview each candidate. In Spain, I was informed by a University of Barcelona professor that these interviews become "disgracefully abusive" in order to keep candidates on the defensive.

Once the committee completes its task, its recommendations are transmitted through the university senate (consisting of all professors) to the ministry of education (and to the crown in the case of the monarchies), where the actual appointment is made. In all European democracies except Great Britain, professors are actually civil servants of the state, not employees of their respective universities.

Nothing more dramatically demonstrates the importance Europeans attach to the position of professor than the intensive nation-wide interest which the people of Sweden manifest in each appointment and the public controversy that is often provoked. When a professorship is to be filled, a selection committee is created composed of several experts from the field of the vacancy, some from the university faculty and some from outside. Each member independently studies the qualifications of the applicants, prepares a written appraisal of each (often one hundred pages or more in length), and rates them in his order of preference. These comments and recommendations are then transmitted for action through

university authorities to the Ministry of Education. However, before the appointment is made, the applicants and the press are given access to the written appraisals, and these usually receive detailed coverage in most major newspapers. Candidates are provided the opportunity to submit "rebuttal" statements in their own behalf, and these, too, are fully reported. Newspapers frequently take strong editorial positions for or against certain candidates, and the public often enters the controversy through letters to the press. Anonymous documents viciously attacking a candidate are known to have been employed on occasion. In more than 10 per cent of the cases, according to Swedish educators, such bitter disagreement is provoked that widespread ill will persists for years after the professorship is filled. (The closest American educational counterpart of this practice is the public excitement and clamor usually engendered when one of our great universities undertakes to hire a new football coach.)

THE exalted status of the European professor is, of course, a reflection of the great respect in Europe for intellectual things; it is also related to the fact that in European countries professors are far fewer in number, and the professorship more difficult to attain, than in the United States. Sir Keith Murray, chairman of the British University Grants Committee, and incidentally the holder of a Cornell Ph.D., believes American professors lack public prestige in part because we "debase the currency." In 1955–56, for example, only 1,421, or approximately 14 per cent, of the 10,202 academic staff members of British universities had the title "professor"; most of the remainder were "readers" and "lecturers." By contrast, more than 75 per cent of the staff members of American universities are officially designated as professor, associate professor, or assistant professor, and all of these are addressed as "professor." A student-to-professor ratio as high as 100 to 1 is not uncommon in European universities in contrast to the 12-to-1 ratio generally maintained in the United States. In fact, in the typical European university, there is only one "professor" for each examination subject (history, linguistics, botany, and so on).

Of greater significance, however, are the more exacting standards for appointment to the position of professor in Europe. In America, the Doctor's degree or its equivalent, coupled with demonstrated competence in teaching and research, satisfies the requirements for a professorship. In Europe, the successful candidate for appointment is usually a person of genuine distinction in his field of scholarship or one who is capable of achieving such distinction. Professors in several European universities have expressed amazement at the unimpressive scholarship of some American professors assigned to their institutions under Fulbright grants.

In most European countries, professors receive remuneration commensurate with their public importance. In Sweden, Belgium, and Great Britain, the salaries paid professors convert, at the official rate of exchange, to between $8,000 and $9,000; in France, West Germany,

the Netherlands, Norway, and Denmark, they are somewhat lower. In terms of actual purchasing power, the salaries in all of these countries, except inflation-ridden France, would be the equivalent of $11,000 to $14,000. And far more important, these salaries compare favorably with the earnings of other professional workers such as doctors, lawyers, and industrial scientists and engineers, whose compensation in the United States is generally double that of professors.

In not one of the forty European universities I visited were professors being lost to private industry as in our own country; quite to the contrary, when there are vacant professorships in science and engineering, applications are usually received from qualified persons employed in industry. This situation is attributable not only to the relatively favorable academic salaries but also to the prestige and freedom enjoyed by professors.

IN FACT, university academic affairs in all European democracies are under the absolute control of the professors; the universities are truly self-governing communities of scholars. The lay boards appended to universities in some countries, such as the curators of the Dutch higher institutions and the University Courts of the British provincial universities, have jurisdiction over fiscal affairs only. Authority over education and research is vested in an academic senate or similar body comprised entirely of professors. Except for the permanent vice-chancellors of the British universities, I found in Europe no professional administrators of the American type. The rector, who is the head of the university, is a professor elected by his colleagues, usually for a term of from one to three years; deans are chosen in the same manner. This system has served to maintain teaching and research as the central functions of European higher education and has prevented administration from becoming an end in itself, a regrettable tendency in many American institutions. Sir John Wolfenden, brilliant vice-chancellor of Reading University, says that his professors regard a deanship as a bore; as long as this attitude persists, he believes, his institution should remain first rate. In Europe, physical plant maintenance and other "housekeeping" duties are assigned to a university "secretary," often a lawyer. Several such secretaries whom I met insisted that theirs was exclusively a job of "serving the professors." However, an unmistakable trend toward stronger and more stable academic administration in line with American practices is apparent in Dutch, Belgian, and Scandinavian universities. Rectors who display marked leadership capacity and a facility for securing money are being re-elected to several successive terms of office; the last rector of the University of Stockholm served in this capacity for twenty-five years.

Nevertheless, the administrative structure of American universities is clearly abhorrent to European professors. They express grave misgivings over the control our lay governing boards exercise over universities, especially in the appointment of presidents. It made no difference when

I explained that it is almost universal practice for boards to consult democratically selected faculty committees in choosing a president. Several European professors who had served in American institutions were severely critical of the "employer-employee" relationship between administrator and professor. An internationally known scientist at the University of Grenoble informed me that in seeking funds for research he was perfectly free to by-pass his dean and rector and go directly to agencies of the national government in Paris. In an American university, he declared, he would be dependent on his dean for such funds; if the dean disliked him, he would probably receive nothing!

In fact, European professors make a fetish of their personal and academic freedom. Appointed for life, they can be removed only if guilty of a serious criminal offense. I was told of a Spanish professor, recently imprisoned because of an attack he made on the Franco government, who held his position and drew his full salary during his internment. Professors in continental universities proudly cite their status as civil servants of the state as the bulwark of their freedom. Ironically, and with equal pride, British professors express gratification that they enjoy freedom because they are *not* government employees. The increasing dependence of British universities on state support (now the source of 72 per cent of their income) has bred considerable fear of state control both within and without the institutions. Sir William Haley, editor of the London *Times*, asked me pointedly whether American universities had paid the price of state interference in return for public funds.

The research contracts so common between American universities and private industries are especially offensive to many European professors, who are sure that such a relationship with the world of trade jeopardizes both academic dignity and freedom. This attitude is much more prevalent among older professors; many in the younger group are eager to receive private support for their own studies. However, from laymen and from an occasional professor one hears criticism of the aloofness of the universities from the community. A vice-chancellor of a Scottish institution complained that the attitude was all too common among British professors that any undertaking of a practical value was unworthy of a university. An executive of Unilever in London echoed this complaint. An economist at the University of Modena and a scientist at the University of Rome spoke despairingly of the granite-like resistance to change of the professors in their institutions, especially if the change represented adaptation to contemporary social or economic needs.

THE prestige enjoyed by European professors and universities is largely responsible for the ambivalent status of the student. By virtue of his indentification with a university, he is treated with unusual deference by the general public. However, in the presence of awe-inspiring professors within the university, he becomes subservient to a degree that many American students would find intolerable.

Flourishing national unions of university students are gaining increasing political influence in most European countries. Although organized to promote student welfare, many of these unions are now active in public affairs generally. The Greek Union of University Students two years ago successfully opposed a fee increase planned by the Ministry of Education; the same organization staged the public demonstrations protesting British policy in Cyprus. The Swedish Union is credited with arousing public opinion to the financial and educational shortcomings of the nation's universities sufficiently to bring about the establishment in 1955 of the important Royal Commission to study and propose university reforms.

The National Union of French Students, with over 100,000 dues-paying members in thirty-seven higher institutions, is a politically potent organization whose officers have direct access to top-level government officials and work closely with the Ministry of National Education. The Union has succeeded in securing increased state support for dormitories and financial aid for needy students, has organized a national student health-insurance program, and has sponsored student social and cultural organizations throughout the nation's universities. Its paramount aim at present is to extend educational opportunity in France in order that qualified children from the lower classes may have access to the universities. In fact, the organization has representation on an official commission now studying needed reforms in French education.

Officers of the Union whom I met acknowledged the organization's strong interest in public affairs affecting the nation's youth; French policy in Algeria, for example, was the subject of heated discussion at the Union's 1957 national convention. The leaders of the Union impressed me with their almost grim seriousness of purpose. Displaying few characteristics of young revolutionaries or even doctrinaire radicals, they manifested attitudes best described as moderate but positive, and displayed a sense of responsibility and an understanding of public issues too seldom encountered in American youth of the same age.

Within the precincts of the university, the student is accorded little of the deference which the student unions exact from the general public. In fact, so impersonal is the academic process that visiting American educators have characterized some European universities as little more than "examining bodies" in their relationships with students. In the typical university, there is no compulsion on the student; he attends classes or not as he sees fit. He is completely on his own responsibility so far as housing, health, recreation, and scholastic and personal problems are concerned. He is required only to present himself for examinations, usually once at the end of his first year and again at the conclusion of his university course.

Although seminars are conducted for advanced students, the lecture is the principal method of teaching, and it is invariably a virtuoso performance in scholarship, the students filling the role of silent but ad-

miring spectators. By American standards, the lecture is conducted with severe formality. Male students are expected to present themselves clad in ties and jackets. They assemble in the lecture hall prior to the professor's appearance, rise upon his arrival, and remain standing until he motions them to be seated; they applaud when the lecture is finished and stand by their seats until the professor has departed.

American observers are struck by the formal character of student-professor relationships generally in Europe. Class discussions are unheard of; the awesome regard in which professors are held discourages students from expressing an opinion, and they are reluctant to ask questions for fear of appearing stupid. So firmly entrenched are these customs that American exchange professors have found it difficult to stimulate any student participation in their classes. In fact, an occasional American has earned the contempt of both students and professors because, to quote one of our European cultural attachés, he was "too buddy-buddy" with students.

Despite the far more rigorous academic standards of European universities and the fact that students must accept full responsibility for their own education, student attrition is substantially lower than in America. This is a result in large part of two other conditions which differentiate the European student from our own: the excellence of the education he receives in secondary school and the absence from universities of elaborate extra-curricular activity programs to divert students from the main task at hand.

ADMISSION to universities in Europe demands significantly higher standards of mental ability and scholastic achievement than in America. Only from 5 to 8 per cent of the youth in any age-group enter universities, and these would be equal to the top 10 per cent, intellectually, of the freshman class of a typical American Midwestern university. The European student receives in his secondary school (the lycée in France, *liceo* in Italy, Gymnasium in Germany, and so on) the equivalent, in some respects, of a four-year liberal-arts education in an American college; in fact, the average college graduate in this country would find it difficult to pass the general-culture examination, such as the *baccalauréat* in France, required for admission to a European university.

From the beginning of his university career, the student concentrates in his field of specialization; he is assumed to have brought with him a sufficient mastery of his language and a broad cultural education. In America, by contrast, most university students take a full year of English composition and, even in scientific and technical curriculums, devote 20 per cent or more of their time to general or liberal courses. By virtue of immediate specialization, many European students earn in three or four years a diploma which represents six years of university study (including two years of graduate school) in our own country.

Subject as he is to such demanding standards, the European student has little opportunity or inclination for the manic-type campus life and activity program which absorb such abnormal amounts of time and energy in American institutions. One finds student political clubs or organized religious groups in many European universities; most institutions have student bars; and a few have sports programs such as the winter-sports activities of the Swiss universities. However, in the forty universities I visited I encountered only one instance of overemphasis on athletics: an Oxford don confided to me (after making certain there were no eavesdroppers) that in one of the thirty-two Oxford colleges, it was rumored that if a choice had to be made between two applicants for admission of equal academic ability one of whom was an athlete, the athlete would be selected.

Broaden the Director's Powers

By A. K. Birulia

Translated by Ivan D. London

WITHIN higher educational institutions, the goal of improvement in course work, scientific activity, and training urgently requires the solution of a number of organizational problems. It is necessary to shield the directors of institutions of higher education from petty supervision, of an administrative and financial nature, by the Ministry of Higher Education. At the same time, the Ministry must strengthen its guidance in matters of basic policy. The speediest possible confirmation of standard regulations for higher educational institutions is of the first importance. After all, a set of such regulations has been under discussion more than once in scientific-pedagogical circles. The regulations provide for a certain expansion of the powers of the director and council of the higher educational institution—something which is urgently needed for bettering higher-school activity.

In our opinion, the present system of determining salary schedules for the staff is out of date and is a serious obstacle to the continued growth and progress of institutions of higher education. Any commission assigned to check on their work directs its attention, in the main, to

This article, written by A. K. Birulia, *director of the Khar'kov Motor-Highway Institute, was first published in "Vestnik Vysshei Shkoly" ("Herald of the Higher School"), 1956, No. 2, pp. 4–7.* Ivan D. London, *the translator, is an associate professor of psychology at Brooklyn College.*

ascertaining whether the teaching load is being maintained. There is absolutely no leeway allowed the director in the matter of regulating the size of a given teacher's instructional program: for example, in allowing a decrease in his load when he is concentrating on the most crucial part of his dissertation or is required to allot a great deal of time to activity on behalf of industry. The powers of the director in this area must be considerably expanded. The size of teaching programs in the specialized-training and basic general-science departments must also be such as to permit the teacher in question to successfully discharge his other obligations connected with higher education within his institution. This applies above all to creative research on major problems which unite the scientific interests of several departments.

Many teachers consider that coping with their teaching load is the only job required of them. Sundry remaining matters—scientific, organizational, and methodological activity; help to industry; training; direction of student circles—are viewed as outside job requirements, as if they were within the sphere of social commitments.

This incorrect view of things is re-enforced by the fact that both the teacher who does no research and the teacher who engages in, or organizes, productive scientific activity draw the same salary. The time has come to alter this situation and to introduce into higher educational institutions a system of remuneration that would make clear to the teacher that he is under the director's orders, and must view the various scientific-pedagogical and training activities connected with higher education as definite obligations which he must discharge. The activity schedules of the regular teaching staff should differ according to the type and importance of the institution, and should be dependent on the kind of student body it has, the level of its scientific activity, and the like.

Serious deficiencies in planning the professional preparation of personnel; repeated changes in the staffs of institutions of higher education with respect to fields of specialization, faculties, and departments; and also changes in the size of enrollment—all these interfere with strengthening the teaching staff. In order to do successful work, a teacher must be intimately connected with an institution of higher education over a long period of time. Only in this way can he attain a high degree of scientific and methodological development.

As soon as possible, the Ministry of Higher Education must establish a permanent structure for institutions of higher education and a long-range plan of development for each of them. This will foster improvement of the scientific-pedagogical teaching staffs and, as a consequence, advance the pace of departmental research work. Fruitful scientific activity on the part of teachers will not only bring about improvement in regular coursework but will also assist in the realization of technical progress for the country. It is vital that certain conditions be met in the organization of such scientific activity.

ONE of the most important conditions of fruitful scientific activity is the existence of a material foundation to support it. Old, well-established institutions of higher education which enjoy a firm association with industry have a rich and up-to-date material groundwork. However, many of the institutions which have been created in the last two decades need considerable strengthening. The insufficient appropriations allotted them for equipment make it impossible for them to strengthen their departments of modern technology. If this is the case, neither internal resources nor the inventiveness of teachers and auxiliary personnel will remedy the situation, since what is required is the purchase of specific installations, manufactured by particular industrial concerns.

Substantial amounts of money which could be spent for departmental equipment are surrendered by higher institutions under contract with industry on the completion of work. It is unfortunate that in the great majority of cases such resources must be sacrificed, because, in principle, purchase of equipment chargeable to contract funds is permitted. Although all industrial organizations for which research is done agree willingly to the inclusion of funds for equipment in projected estimates, in practice the utilization of these funds meets with insuperable obstacles in the majority of cases. Higher educational institutions engaged in research under contract must be granted, as soon as possible, not only the formal right, but also the actual possibility, of acquiring the equipment necessary for carrying on scientific research.

In the Ministry of Higher Education, proposals for the centralized manufacture of scientific and classroom equipment to be utilized in the workshops and industrial stations of higher educational institutions do not meet with support. In our opinion, the production of the simplest equipment should be entrusted to the individual institution, whereas complicated apparatus and machinery which cannot be made in its workshops should be manufactured on a centralized basis in various industrial concerns.

Substantial oversights in the scientific activity of institutions of higher education are also attributable to the organizational isolation of the majority of technical institutes from the branch ministries. The connections of these institutes with one another, and especially with various industrial and scientific organizations and enterprises, are somewhat tenuous. Inefficient organization and distribution of scientific-technical information results in duplication and other evils which follow from the failure to plan adequately for scientific research.

We believe that scientific conferences of scholars in related fields of specialization should systematically call for the discussion of projects in progress and completed work. It cannot be considered normal procedure, for example, that teachers of five motor highway–construction institutes have not once, from the time they were transferred to the jurisdiction of the Ministry of Higher Education, met in a joint scientific

conference devoted to the development of motor transport, the construction of motor highways, and the improvement of road and construction machinery; or that they have not discussed with the members of the Ministry of Motor-Transport and Highways or other ministries either the work completed or the possibilities of applying the results of scientific research in other projects. Considering the great utility of inter-institutional scientific conferences, the Ministry of Higher Education should undertake to support them financially and should direct various institutions to organize them.

It is self-evident that a permanent staff of auxiliary personnel is necessary for the conduct of course and experimental work, the operation of equipment, and the preparation of experimental apparatus. At the present time, a great deal of important experimental research is not being pursued in technical institutes, partly because of lack of equipment, but also because of the insufficient number of available laboratory workers, course instructors, and mechanics. A substantial increase in the size of the auxiliary staff in technical institutions where laboratories and workshops are widely used in the process of instructing students is a necessity. Both the inadequacy of the material-technical plant and the insufficiency of auxiliary personnel make it impossible to use the teaching staff to the fullest extent, and thus exert a negative influence on the training of scientific personnel—the candidates of science and, especially, the doctors of science.[1]

It would seem that the present system of training candidates for the doctorate in higher technical institutes is ineffective and in need of reform. In view of the present level of development in the technical sciences, it is almost impossible to conceive of a scientific researcher's writing his dissertation in isolation from his colleagues and an institutional laboratory. The subject of a doctoral dissertation should be a complex problem; and two or three dissertations by the candidates of science who assist the doctoral candidate in his research should contribute to its solution. Moreover, such an organization of research requires the presence of a permanent staff of laboratory assistants and the participation of advanced students in the research. In order to create maximally suitable conditions for the doctoral candidate, the director of the higher educational institution should possess the power, not only to assign auxiliary personnel, but, if necessary, to free the doctoral candidate from instructional work. At present, only a few institutions and departments have the power to create such conditions for doctoral candidates.

SO FAR as the organization of course work is concerned, we consider it necessary in this article to dwell on one problem—that of work practice. Work practice of students specializing in construction has its own special difficulties: stations for student practice are dispersed and are relocated

[1]Roughly, those working for their M.A. and Ph.D. degrees respectively.

from year to year; the number of construction enterprises carrying on work at a high technical level is not great, and cannot, therefore, accommodate all students; in addition, many of the well-equipped organizations are located in far-off places. In theory, the Ministry of Higher Education is supposed to assign to individual higher educational institutions definite construction organizations for purposes of student practice. However, the Ministry does not always do this. For example, the Khar'kov Motor-Highway Institute failed to receive the necessary number of practice stations which should have been allotted to it, and was therefore forced to negotiate on its own with many construction organizations and enterprises to procure the stations required for student practice. Under such conditions, student practice frequently turns out to be inferior because there is no one to guide and supervise the students at the work station. In my opinion, the effectiveness of work practice can be considerably increased by sending students, not to a rigidly assigned station, but to large road-construction organizations which are well equipped with machinery and which undertake construction at a high technical level.

The insufficient number of stations for student practice may be compensated for to some degree by wide development of scientific-training proving grounds. Our institute has such a proving ground, with the road and construction machinery and installations that are necessary for experimental work. The student's practice training is conducted at the proving ground. Such a machinery station should be an integral part of construction and motor-highway institutes. The Ministry of Motor-Transport and Highways has apportioned sufficient road-building machinery to institutions specializing in this area—an action which considerably expands the possibilities for improving the work-training of students.

Short Contributions

College Credit by Examination

A questionnaire study of 301 colleges and universities in the North Central Association, recently completed by the faculty of Harding College, revealed that 171 of the institutions at present grant college credit by examination. In 105 institutions, all departments can or do participate in the program, as compared with 45 in which the practice is limited to particular areas or departments. However, of those indicating no limitation, several institutions responding to the inquiry noted lack of interest in the program on the part of many teachers in various fields. The departments most often mentioned as using the credit examination were, in the order of frequency, languages, mathematics, English, chemistry, biology, music, business and secretarial practice, and speech.

Approximately 70 per cent of the schools granting credit by examination indicated that the primary reason for adopting the program was to aid the able, highly motivated student. Other reasons frequently mentioned were recognition of skills and educational experiences obtained outside the classroom, avoidance of repetition in course work, recognition of foreign-language ability, and provision of a basis for passing on requests for advanced placement. Despite increasingly large student bodies and teaching loads, giving college credit by examination is apparently not looked upon with favor as a means of accommodating more students, since only 10 institutions gave this as a reason for adopting the program. Rather, the consensus is that the practice best serves higher education through the stimulation afforded the able, well-motivated student to attempt challenging independent work.

Nineteen institutions indicated that the opportunity to earn credit by examination is open to all students, as contrasted with 65 in which it is restricted to those students who have demonstrated unusual achievement or whose training and experience outside the classroom give promise of creditable performance. Other institutions give credit only for knowledge revealed on the College Entrance Examination Board's advanced-placement tests taken in high school. Many colleges and universities which impose no limitation stressed the fact that students who are allowed to take the examinations are carefully selected by various means.

A majority of the institutions included in the study permit the student to take the examinations throughout his four-year program. Certain

colleges require that the student be in residence for a specified minimum period of time; some limit the time during which the examinations may be taken to the first two years, others to the first semester of the freshman year. One institution requires that the examination "not be in an area or level of instruction below that of courses already taken for credit." Other schools permit transfer students to take the examinations.

The difficulty of the examination is considered the most important safeguard for ensuring a high quality of performance. Individual screening conferences with the instructors who prepare the examinations were the second most frequently cited means of securing high performance. Many schools also pointed out the advisability of having a special committee, the academic dean, or the head of the department examine and pass on the applicant's qualifications. Such safeguards not only serve administrative purposes but also impress the student with the fact that the comprehensive examinations are not an easy method of obtaining credit.

Ninety-one of the institutions questioned grade students on examinations for credit in the same manner as for regular examinations on course work; 60 do not. Some reported that they do not accept credit by examination toward residence work; two others assign a grade but do not place it on the student's permanent record. Several exclude the examination grades in computing honor points and grade-point averages. Ratings often used in lieu of letter-grades are "Pass," "Passed by Examination," "Credit by Examination," and "Cr."

In 104 of the institutions, students are charged an examination fee. The charges range from $.25 per examination to $15.00 per semester-hour of credit. Some colleges charge a fee only if the student is not regularly enrolled. One assesses a tutoring fee of $2.00 per hour for the professor, and another, $10.00 for the instructor preparing and grading the examination. Forty-five charge no fee at all.

An analysis of the maximum number of credits which can be earned by examination establishes a mode of 15 semester-hours; 8 schools impose a formal limit of 30 semester-hours. Although 66 institutions place no limit on the amount of credit which can be earned by examination, students rarely earn more than 15 hours by this method because of the difficulty of the examinations. Three institutions limit the number of credit-hours by examination to one-fourth the total required for the Bachelor's degree.

In 96 of the institutions, the examination is prepared by the instructor of the course. Many colleges and universities reported that the instructor prepares the examination under the supervision of the department head or a departmental committee. Several require that examination questions be submitted to a special committee to ensure the maintenance of adequately high standards. Those colleges participating in advanced-placement programs generally require that the College Entrance Examination Board's standardized examinations be used.

The essay examination is most frequently used. Thirty-eight institutions use combinations of several kinds of tests, such as written and oral, essay and objective, or written, oral, and objective. A number indicated that the type of examination is selected by the instructor and the department, and may vary from one to another. Some listed particular kinds of tests that were adaptable to certain courses; for example, speed tests in typewriting and shorthand, and performance tests in music and speech. Apparently there is general agreement that whatever type of examination is used, it should be exhaustive and intensive—of greater difficulty than examinations in regular courses.

Student reaction to the practice of granting credit by examination was reported to be favorable by practically all schools. Some, however, were careful to point out that only a small percentage of the student body (2 or 3 per cent) is affected by the program. One institution stated that students were more interested in taking examinations for exemption without credit than examinations for credit.

Although there is still a sizable group of faculty members who believe that an examination cannot be substituted for classroom experience, there seems to be wider acceptance of the practice now than a decade ago. A majority of administrators reported approval of the program by the faculty, although several indicated that reactions were mixed.

The outcome of the practice of giving credit by examination, as reported by 57 institutions, has been acceleration of the capable student. Almost an equal number of schools, 49, stated that the result was a combination of "acceleration and enrichment." An indirect advantage of the use of the examination is that it furnishes a sound basis for assigning credit to students transferring from unaccredited institutions. In most instances, the work completed by examination has been fully accepted upon transfer, at both the undergraduate and graduate levels. Fifty-four institutions reported, however, that they had not had enough opportunities to judge the work of students who had earned transfer credit by examination to make a positive statement concerning the value of the program. One institution questioned such credits so long as "credit by examination" was written on the transcript, a practice which has been discontinued.

From this and other studies of the procedures in various colleges and universities granting credit by examination, certain characteristics of a successful policy emerge:

1. Proper recognition and support should be given the program by members of the faculty and administration. At the same time, only those students with a reasonable expectation of doing well on the examinations should be encouraged to take them. Because success in independent study depends greatly upon such intangibles as drive, enthusiasm, and motivation, the role of the counselor and the instructor is very important.

2. Every effort should be made to obtain or construct examinations which will ensure a high quality of performance. There should be con-

tinuous evaluation and revision of the tests to guarantee depth and comprehensiveness.

3. The success of a program of credit by examination is dependent to some extent upon the enthusiasm of the faculty, one measure of which is the number participating in the development of a sound program. To ensure a dynamic policy, a standing committee composed of members of the faculty and the administration should review the program periodically.

JAMES A. HEDRICK, *Harding College*

Expensive Education on the Free Market

Rising enrollment, increasing demands for admission, and spiraling costs present American colleges and universities with an unparalleled crisis. Educational institutions must meet the heavy influx of students and still maintain a modern physical plant and an adequately trained and paid faculty if the dual mandate of quality and quantity in education is to be achieved. As a result, the cost of a college education is expected to soar within the next decade. It is appropriate, therefore, to review the general subject of student-loan financing and examine the alternative methods of finance by which higher education may maintain its academic standards and increase its physical facilities.

Many experts have estimated that the cost of attending college will more than double within the next ten years. Since the present annual cost of attending institutions of higher education ranges from an average for each student of $1,500 in public universities to $2,300 at private schools, additional income obviously will be necessary if the present approximation of equality of educational opportunity is to continue. Part of the required increase in income will come from additional tax revenues, but the remainder will have to be secured by (1) lowering the quality of education, (2) increasing philanthropic income, or (3) raising tuition.

In the face of the Soviet challenge and the growing complexities of American society, certainly we cannot afford to sacrifice quality in education. But larger enrollments cannot be met without corresponding expansion of physical plant, and faculty salaries must be increased if qualified men and women are to enter and remain in the teaching profession. Thus additional funds must come from both philanthropy and higher tuition. It is highly improbable that financing through foundation grants, alumni funds, and endowment drives, which at present furnish 20 per cent of the cost of higher education, will increase to the extent necessary to carry the entire burden of rising costs. Under these circumstances, students must be asked to defray a greater portion of the cost of their education through increased tuition.

Although higher tuition would not appreciably affect the higher-income groups, middle- and lower-income families cannot be expected to meet the

increases with their own immediately available funds. In spite of the fact that the major portion of scholarship aid is now going to students in the middle- and lower-income groups, many students in these groups cannot afford to attend college unless some alternative plan of financing becomes widely available.

Of the six major sources of student income, that is, long-term savings, family help, summer earnings, part-time work in college, scholarships, and loans, the last two are the only ones which can be augmented substantially. It is most unlikely that funds will be available to increase scholarships appreciably in the near future. Student loans, therefore, must be substantially increased.

In a practical student-loan plan, interest rates should be low, no attempt should be made to influence the students' educational aims and interests, funds should be available to all students, repayment plans should not impose hardship on the student, and the volume and amount of loans should be flexible. A brief examination of five different types of loan plans currently in operation will reveal their basic strengths and weaknesses as measured by these criteria.

Privately administered funds and trusts are operated independently of educational institutions and are often local or regional in scope. Usually, banks and charitable, religious, professional, or social institutions administer these loans. In many cases, the loans carry restrictive measures which limit their use.

State-wide guarantee funds are administered by banks or non-profit state corporations. The recently organized Massachusetts Higher Education Assistance Corporation is an example of this type of loan plan. Its Higher Education Loan Plan (HELP) offers funds to Massachusetts college students. However, it excludes Freshmen, limits the amount that may be borrowed, and stipulates that repayment must be made within three and a half years following graduation. Similar plans have been started in other states, including New York and Maine.

Various colleges have developed arrangements with banks for student loans. The most striking example of direct bank-lending is a plan which provides loans to be repaid in regular monthly payments over a period of six years. Other banking plans vary widely as to the loan limits, interest rates, and repayment periods. In general, they lack flexibility, and are often too restrictive in the length of repayment time. The monthly-payment plan sponsored by commercial lending organizations is similar. This alternative and direct loans from banks eliminate heavy expenditures to meet college costs at the beginning of each year by balancing the costs over evenly distributed payments, which usually begin two years before the student enters college. The major drawback is an interest rate which is sometimes excessive.

Under the recently passed National Defense Education Act, the federal government is now able to provide up to $250,000 a year for individual college loan plans administered by the college itself. Calling for a

reasonable rate of interest (3 per cent) and allowing a longer repayment period than most plans (up to eleven years following graduation), the federal loan plan is a definite step forward. Special consideration, however, is to be given to students planning to major in education or to those whose special field of interest is science, mathematics, engineering, or a modern foreign language.

College-administered funds are the most accessible to students and are available in a variety of forms. These loans are ordinarily small in amount and short-term. As a result of these restrictions, few students take advantage of them: only about 1 per cent of college tuition fees are paid with these funds. Colleges and universities should lengthen the period of repayment, increase the amounts of loans, and publicize this method of student financing.

The most striking fact about present loan plans for students is that, on the whole, they are limited in one or a number of ways: excessive rates of interest, inadequate repayment periods, or restricted availability. The program with real possibilities of expansion is the federal loan program; but because of its restrictiveness and the possibility of future controls, another approach is needed.

A workable loan program should be instituted under which a government agency would purchase students' loans from their lenders, the colleges and universities. A similar program exists in the area of real-estate finance. "Fanny May," as the Federal National Mortgage Association is nicknamed, was established in 1938 and reorganized under the Federal Housing Act of 1954. It purchases and sells government-insured or -guaranteed mortgages on the secondary mortgage market. The general operations of Fanny May could easily be adapted to meet the demands for more funds for higher education by financing student loans to pay tuition.

A federal corporation with a given amount of capital (perhaps $50 million initially), and subsequent amounts to be added according to need, could enter the secondary-loan market and purchase student promises-to-pay from colleges and universities. The institution would thus be able to supervise and control the administration of student loans on its campus without loss of capital. In the past, private financial institutions have not engaged in the practice of purchasing student notes in the secondary market. (Some financial institutions, such as insurance companies, are not permitted to purchase loan obligations from institutions of higher education under present laws.) Initiative by the government might well prove to some financial institutions, and the agencies which control them, the feasibility of aiding higher education by this means, and might encourage colleges and universities to administer loans at reasonable rates of interest and with longer repayment periods. The outstanding record of repayments under such programs as HELP indicates that an interest rate of approximately 4 per cent should be sufficient to cover the services rendered.

In the future, other student-loan plans will probably be available, but the feasibility of a federal corporation similar to FNMA warrants prompt consideration. In view of the urgent need to make higher education a possibility for all able students, realistic plans such as this one should be acted on at once.

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MICHAEL ROSE, *Ohio Wesleyan University*

Primitive Thinking and Reasoning among College Students

Most college professors, regardless of the subject they teach, encourage students to order their thoughts logically and in accordance with demonstrated causal relationships. In other words, we desire that our students "reason" or engage in "critical thinking." We also hope that as they develop this faculty, their exercise of it will extend beyond the classroom. These goals are elusive and difficult to achieve. The habit of uncritical thinking which most students entering college have established over the years is very hard to break. At times, it appears to many of us that the students' thinking processes are not only uncritical but irrational. Of course, college students are not alone in this respect; but, since they are available to psychologists for tests, their deficiencies are exposed.

The present study is an extension of a recent one conducted by Charles A. Stenger, for which he constructed a scale to measure the existence of childish and primitive modes of reasoning.[1] Participants were asked to indicate the extent to which they agreed or disagreed with such statements as the following:

> A person should always be careful to control his thoughts.
> If you wish for something hard enough, it will come true.
> One good way to avoid trouble is not to think about it.
> If everything is going smoothly, I usually let well enough alone by not talking about my good fortune.
> Having wrong thoughts is just about as bad as [putting them into action].

Scores on the scale range from 28 to 196; the higher the score, the greater the prevalence of primitive thinking, or the less reasoning in the accepted sense of the word. The mean score of Stenger's students at Western Reserve University was 83.65 (a range of 32 to 145).

The investigation described in this paper began during the winter quarter of 1956 when a battery of standardized tests was administered to approximately 250 students in introductory psychology classes at the University of Tennessee. Among the tests utilized were the Magical Thinking Scale, the Watson-Glaser Critical Thinking Appraisal,[2] and the

[1] "Magical Thinking" (unpublished Ph.D. dissertation, Western Reserve University, 1952).
[2] Yonkers-on-Hudson, New York: World Book Company, 1951–52.

Verbal Reasoning portion of the Differential Aptitude Tests (DAT).[2] Table I shows the mean scores of our subjects on each of these tests.

It is to be noted that the "magical thinking" score of our students is similar to the mean score which Stenger obtained (83.65). The mean score on the Watson-Glaser Critical Thinking scale is equivalent to the forty-fifth percentile (the higher the score, the greater the degree of critical thinking), whereas the mean score on Verbal Reasoning is at the eighty-ninth percentile.

TABLE I

MEAN SCORES OF STUDENTS IN INTRODUCTORY PSYCHOLOGY CLASSES ON THREE SELECTED TESTS

NAME OF TEST	N*	MEAN
(1)	(2)	(3)
Magical Thinking	139	89.12
Watson-Glaser	139	68.99
Verbal Reasoning (DAT)	139	38.71

*N is less than 250, since not all of the students took all of the tests, mainly because of absences.

Certain interrelationships can be evaluated by making a few assumptions: (1) The Magical Thinking score reflects uncritical thinking in the past, (2) the Verbal Reasoning score is a satisfactory measure of intelligence, and (3) the Watson-Glaser score is a valid measure of critical thinking.

TABLE II

THE CORRELATION BETWEEN INTELLIGENCE AND UNCRITICAL THINKING

TESTS	N	r
(1)	(2)	(3)
Magical Thinking (Verbal Reasoning)	139	−.1407
Magical Thinking (Watson-Glaser)	139	−.2531

In Table II, the r of −.1407 indicates that in this sample of students there is little or no relationship between intelligence and "magical thinking." This is not surprising; and without unjustifiably extending the results, it may be said that the student of high intellectual ability is as likely to engage in mental activity of an irrational nature as the student with poorer intellectual equipment. To put it another way, elements of primitive thinking are present as often in bright students as in dull ones.

The r of −.2531 between "magical thinking" scores and Watson-Glaser scores is significant at higher than the .01 level. One interpretation

[2]New York: Psychological Corporation, 1947.

of this correlation is that there is a slight tendency for those who score high on the Magical Thinking Scale to score low on the Watson-Glaser scale. An explanation of this phenomenon is that the elements of "magical thinking" tend to disrupt the individual's critical-thinking ability, or, as was suggested before, that the student's past uncritical thinking experiences interfere with efforts to promote his reasoning ability.

Further data were obtained in support of some of these hypotheses from 176 members of the Air Force who were tested while in a special course at Maxwell Air Force Base, Alabama. The group included airmen and officers through the rank of colonel. The mean score for the group on the Magical Thinking Scale was 86.92 (in the study at the University of Tennessee, it was 89.12, and in Stenger's study at Western Reserve, 83.65).

The mean number of years of formal education for the group was thirteen (a range of six years to twenty). The correlation obtained between the number of years of education and the "magical thinking" scores, −.2296, again suggests that there is little or no relationship between educational background and irrational thinking.

When American Council on Education scores were used as a measure of intelligence in the Air Force group, a correlation of −.0409 was found with "magical thinking" scores. Here is even clearer evidence than that obtained from the college students that there is a negligible relationship between intelligence and "magical thinking."

The results of this study are consistent with those obtained by Dennis and Crannell, who studied animistic thinking in college students. Dennis found that about 40 per cent of the students sampled reported that one or more of the following objects were alive: a match, a lighted match, an electric clock, the sun, a five-cent piece, a pearl, gasoline, and the ocean.[4] Crannell confirmed Dennis' findings and also discovered that approximately one-third of the students in a second-year zoology class believed that one or more of the same objects were alive.[5]

In a different type of investigation, Magaret and Sheriffs demonstrated that although college students can give the correct answers on academic examinations, when asked to apply their knowledge to a rather personal situation they respond in terms of incorrect beliefs or attitudes which they held prior to attending college.[6]

The findings of this brief investigation—that there seems to be little or no relationship between intelligence, or educational level, and the degree to which a person engages in primitive or childish thinking processes—should show us the necessity of reviewing the techniques by which we encourage our students to think logically.

OHMER MILTON, *University of Tennessee*

[4]Wayne Dennis, "Animistic Thinking among College and University Students," *Scientific Monthly*, LXXVI (April, 1953), pp. 247–49.

[5]C. W. Crannell, "The Responses of College Students to a Questionnaire on Animistic Thinking," *Scientific Monthly*, LXXVIII (January, 1954), pp. 54–56.

[6]Ann Magaret and A. C. Sheriffs, "Personal Factors Influencing the Learning of the First Course in Psychology," *Journal of General Psychology*, XXXVII (July, 1947), pp. 67–77.

Editorial

The University and Contract Research: An Important Statement

We yield our pen this month to the Academic Freedom Committee of the American Civil Liberties Union, which has recently issued a notable statement, "Concerning the University and Contract Research." This statement deals ably with a matter of great current importance. We are in hearty agreement with it, and are happy to present it here as better than anything we can say on the subject. It should be read widely by persons in higher education. A searching examination of the whole matter is overdue.

The complete statement follows. With the approval of the office of the ACLU, minor editorial changes have been made.

R.H.E.

IN THE years since World War II there has been a striking increase in the extent of non-academic support of research activities in colleges and universities. Most of this support comes from the federal government, but not inconsiderable amounts derive from private foundations and industry. The National Science Foundation has estimated that federal obligations for scientific research and development at institutions of higher education or in laboratories managed by them amounted to $440 million in the year ending June 30, 1958, and that perhaps as much as two-thirds of the expenditures for all research and development performed by colleges and universities currently come from the federal government. In certain fields, such as physics and chemistry, contracts and grants from non-academic sources account for 90 per cent, or even more, of the research budgets of individual departments.

Few would argue that large-scale support for the scholarly activities of university and college faculties does not serve the best interests of the nation and of mankind. Sponsored research has made tremendous contributions to American scholarship and higher education in many ways quite apart from the obvious increase in the volume of research activity. It has made it possible for universities to maintain strong science faculties in the face of intense competition from outside agencies carrying on exciting work in newly developed fields. It has supplied much of the modern strength in graduate education, not only in the form of financial support

to graduate students, but also in providing for them adequate scope for research training and experience.

Our colleges and universities are irrevocably dependent on the support they have been receiving in the form of sponsorship of research, and indeed this support must continue to increase rapidly in the years ahead. However, it is evident that the explosive nature of the present increase is exerting a revolutionary influence on the structure and functions of our higher educational system, and that the short-term and long-term effects of this influence are not receiving the careful study they merit. We are proceeding in a haphazard way, with parts of the academic community enjoying a new-found prosperity, giving but little attention to the far-reaching changes being, so to speak, forced on our universities. It must be clearly recognized that if outside financing of university research and graduate education, particularly in the natural sciences, continues to follow present patterns, it will inevitably lead to a very serious erosion of university control of university activities. We should face squarely the question as to whether we are prepared to break with the long-established tradition which entrusts to universities a large measure of autonomy in their proper functions of education and research—whether we are prepared to replace a significant fraction of this autonomy by a patchwork control exerted by a variety of bureaus with widely differing aims and interests. It would appear evident that a rational decision in this matter, admittedly very difficult to arrive at now, will become increasingly so with the passage of time and the creation of new vested interests.

It may be asked why this problem is one of proper interest to a group which concerns itself with matters of academic freedom. The term "academic freedom" is frequently considered to refer to the rights of individual faculty members in their relations with university administrations and society as a whole. A very important facet of academic freedom, which has perhaps not been as frequently brought into public attention by the pressure of events, is the freedom of the university as a corporate body so to manage its own affairs that it maximizes what it considers to be its important contributions to society. Brief reflection shows that any serious compromise of this broad aspect of academic freedom may well lead to significant impairment of the individual rights of faculty members, either as members of a university or as private citizens.

Various individuals and groups, speaking as isolated voices, have called attention to some of the problems introduced by the mushrooming non-university support of academic research and graduate education. It is the thesis of the present statement that an adequate answer to the broader problem of preserving university autonomy in the face of heavy subsidization from outside will lead to solutions of many of the more specific problems—indeed, will provide the only possible path to such solutions.

It appears worth while to point out here, without full documentation,

a number of the results of government and private sponsorship which appear to us most effectively to emphasize the trend away from university autonomy which has occurred, all but unnoticed, in recent years. Most of these specific problems have been more adequately considered by others,[1] but they are included here in order to give a reasonably fully developed picture.

It is obvious that the application of government security procedures in universities in which classified research is conducted on campus under contracts with federal agencies can lead to situations in conflict with the personal rights of faculty members, including even those who are not engaged in classified research, and can effectively limit the freedom of the university in applying its own proper criteria in the selection of its staff. The case against the acceptance by universities of contracts for classified research has been eloquently stated by Dean Bundy of Harvard.[2] Even in cases of government contracts for completely unclassified research, considerations of political affiliation have entered into the selection of research personnel. We may cite the case of a contract between the Atomic Energy Commission and a leading university which was prematurely terminated when it was found that one of the participating faculty members had leftist political leanings. For a brief period, the Department of Health, Education, and Welfare held to a policy according to which Public Health Service research grants were not awarded to scientists of currently unpopular political beliefs.

Funds for sponsored research are more readily available in some fields of knowledge than in others, so that important areas of scholarship may be neglected. Of the nearly half a billion dollars placed by federal agencies in universities in 1958, 95 per cent went to the natural sciences.[3] Continuation of this trend cannot fail to bring a relative impoverishment to the humanities and social sciences which would certainly not occur if the universities and university scholars were permitted free exercise of their own judgments. In the matter of financial aid to graduate students, and extra financial rewards to faculty members, severe imbalance in favor of the natural sciences is likewise developing under existing patterns of subsidization.

Granting agencies are frequently favorably inclined toward ambitious proposals for so-called programmatic research to a degree which was not evidenced by the universities when they controlled the financing of their

[1]See, for example, the following: National Science Foundation, *Government-University Relationships in Federally Sponsored Scientific Research and Development* (NSF 58–10; Washington, D. C.: Government Printing Office, 1958); American Council on Education, *Sponsored Research Policy of Colleges and Universities: A Report of the Committee on Institutional Research Policy* (Washington, D. C.: The Council, 1954); John C. Weaver, "Some Dilemmas in Graduate Education: A Report to the Carnegie Corporation of New York on a Traveling Fellowship, 1957–1958" (unpublished); "Statement by McGeorge Bundy, of Harvard University," in Commission on Government Security, *Hearings before a Subcommittee on Reorganization of the Committee on Government Operations, United States Senate, Eighty-fourth Congress, First Session, on S. J. Res. 21 . . .* (Washington, D. C.: Government Printing Office, 1955), pp. 470–74; and Louis Joughin, "Scrutiny of Professors," *AAUP Bulletin*, XLIV (March, 1958), pp. 199–210.

[2]Bundy, *op. cit.*

[3]Weaver, *op. cit.*

research activities.[4] It is well recognized that very impressive results have in many instances flowed from large-scale research programs, most notably in the field of nuclear physics. Indeed, many aspects of modern scientific research can be effectively pursued only on a programmatic basis. However, it is also well recognized that in this country it is becoming increasingly difficult to develop support and appreciation for the highly individualistic investigator who contemplatively follows the paths into which his idle curiosity directs him. It is from such unplanned efforts that the fundamental advances in scholarship have always sprung; the studies of Isaac Newton, Michael Faraday, or J. Willard Gibbs could not have been programed.

Certain governmental and industrial sources of funds are, quite understandably, more interested in supporting activities which are developmental rather than fundamental in character. Universities bear a heavy responsibility for fostering the creation of basic knowledge, and we can ill afford to have their staffs and facilities lured by financial inducements into the study of matters of immediacy.

The lion's share of sponsoring funds goes to institutions with outstanding scientists on their faculties and already strongly developed research activities. Thus the stronger schools become proportionately even stronger, and it becomes increasingly difficult for less well-established institutions to meet the competition for staff, students, and finances. It might be argued that this tendency is healthy, that we already suffer from an overabundance of weak colleges and universities. However this may be, the tendency should be recognized and discussed, rather than ignored.

The situation with respect to institutions is paralleled by the relative ease with which scientists with well-established reputations secure generous support for their activities as compared with younger scientists who are actually more apt to come forward with original ideas and are more able to pursue them with vigor.

There is good basis for the view that the indirect costs of sponsored research are larger than the overhead allowances included in most research contracts and grants, and that most fellowships and scholarships awarded by government and private agencies include insufficient amounts for the institution to cover the actual costs of the education it supplies. Thus the large sums channeled into universities under present arrangements may be aggravating their already acute financial problems. This in turn may lead to further intensification of the imbalance between disciplines, since university funds previously available to the social sciences and the humanities may have to be diverted to help underwrite the indirect costs of sponsored activities in the natural sciences.

[4]Recognition of the receptiveness accorded to ambitious proposals has led to the development of practices which should be considered as beneath the ideals of academic propriety and dignity. A recent issue of a scientific weekly carried an advertisement seeking a "financial administrator" for a university research group of 20 scientists, whose duty it would be to seek and maintain sponsorship of the research program from government and industry; it was stated that applicants for the position must have previous experience in obtaining sponsorship and writing up proposals.

There are many clumsy features in the present splintered arrangements for the administration of outside support for academic activities which lead to serious wastes of time and funds. This is particularly true of governmental support. A large university may receive several million dollars annually in government research contracts and grants. For the most part, these funds are awarded to individual faculty members, who may number in the hundreds. Each of these has had to prepare a more or less elaborate proposal which in turn has been subjected to detailed review and appraisal by officials in Washington and panels of government, academic, and industrial scientists. Anyone familiar with these procedures is well aware that at the very least no charges of irresponsibility can be leveled at the various granting agencies; the most sincere efforts are made to ensure that the taxpayers' money is well spent. But when these procedures are compared with the informal conversations between university administrative and academic personnel which usually precede the granting of university support to a research or educational project, it is evident that much time and effort is lost which could better be employed in productive activity. Then there is the matter of reports. Many agencies require annual progress reports, and more detailed reports at the termination of a contract or grant. The only evidence of accomplishment supplied to a university administration by one of its staff takes the form of published articles or books, or of recognition on the part of other scholars. An already bewildering array of diversified fellowship programs, ingenious programs for improving education and teaching at secondary, college, and graduate levels (complete with "validating" questionnaires prepared by commercial "research" institutions), and schemes for developing interest in scientific careers on the part of high-school and college students is being continually added to, with accompanying serious inroads on the time college administrators and teachers have available for their proper functions.

The foregoing summary of some of the problems arising from government and private subsidy of university activities leads us back to the basic question raised earlier—is it in the interest of society to permit the universities to lose a large measure of their authority in shaping the development of their own affairs? We urge that this is a question of the first importance to the nation and to society, and that developments rendering difficult a wise decision are multiplying at such a rate that no time should be lost in instituting an objective review of the situation on a nation-wide scale.

The Reporter

FOUR American universities have been chosen to participate in the North Atlantic Treaty Organization Visiting Professorship Program of 1960–61. Reed College, St. Louis and Tulane universities, and the University of Massachusetts will invite professors from Denmark, Norway, Greece, and the United Kingdom respectively. Funds have been provided by NATO to enable ten professors to give courses, seminars, or tutorial work for one term at a university in a country other than their own within the organization. The program is intended to demonstrate the common traditions and history of the countries in the North Atlantic area and to seek knowledge of present needs and problems of future development. The six remaining professorships are allocated as follows: three professors from the United States will teach in the Federal Republic of Germany, Iceland, and Portugal; one professor from Canada, in Italy; and one professor from France and another from the Netherlands, in Canada.

A GRANT of $3.5 million has been made to Stanford University by the Ford Foundation for a seven-year postgraduate training program for teachers of business administration from underdeveloped countries in Asia, Africa, and Latin America. The grant was prompted by two deficiencies: the shortage of persons with managerial skills, which has restricted business and industrial growth in these countries, and the failure of business education in America to investigate the needs and problems of countries in the early stages of economic development. The new training program will emphasize the means by which economic change can be induced. An advisory committee of faculty members from several graduate business schools will assist Stanford in planning the program.

Sixty foreign students will participate each year. They will spend nine months in study at Stanford and three months as visiting faculty associates at co-operating American business schools. In addition to scholarships, the Foundation grant will provide faculty salaries, research funds, and administrative expenses.

IN ORDER to improve methods of selecting foreign students for admission to American institutions of higher education, twenty-one colleges and universities are sponsoring an experimental project of co-operation between educators here and abroad. The colleges have joined in offering approximately twenty-five scholarships for undergraduate students from Nigeria as a test of their plan. Qualified students will be nominated by a joint Nigerian-American Scholarship Board of distinguished educators and public servants, meeting in Nigeria. Two college-admissions officers from America will join the scholarship board to help make the semifinal selections. Final choices will be made by the admissions officers of the participating colleges in the United States.

Awards will provide, according to individual need, tuition, board, room, and other expenses, but not transportation. They are renewable until a normal Bachelor's degree program has been completed, subject to the usual scholarship regulations of the particular college. The results of the experiment will be evaluated in June, 1961, and the decision made to extend or modify the program.

The colleges co-operating in the experiment are the following: Amherst, Barnard, Brown, Bryn Mawr, Columbia, Cornell, Dartmouth, Harvard, Haverford, Mt. Holyoke, Oberlin, Princeton, Radcliffe, Smith, Stanford, Swarthmore, University of Minnesota, University of Pennsylvania, Vassar, Wellesley, and Yale.

PLANS have been announced by Harvard University to establish a center of humanistic studies at the villa near Florence, Italy, bequeathed to the University by Bernard Berenson. The center is to be a place "where scholars from all nations may find a favoring climate in which to conduct research into the fine arts and their relationship to human life and history." It is expected that $2 million will be needed, in addition to the funds provided by Mr. Berenson, to establish the program and the required number of fellowships.

STUDENTS from thirty colleges in the United States, including Amherst, Barnard, Notre Dame, Oberlin, and Occidental, will participate in the second Operation Crossroads Africa project to further international understanding. One hundred thirty-five American students, more than double the number that participated in the 1958 pioneer project, will join students from ten West African countries in two-month study-work camps beginning June 15. On his return to America, each participant will speak about his experiences before school, church, and club groups. Contributions from foundations and corporations will finance approximately half of each student's expenses. A study of the impact of the project both in Africa and in America will be conducted in the fall by the Center for International Studies, Massachusetts Institute of Technology.

THE University of Wisconsin has received a million-dollar grant from the Ford Foundation for a research, educational, and extension program in urban problems. In the Milwaukee area, a smaller urban area, and—for comparative purposes—a rural area, an intensive study will be made of such factors as design, finance, history, redevelopment and rezoning, water supply, and sewage problems. The program will also include training of urban specialists at the undergraduate and graduate levels. The university hopes to become a national center for study in this field.

REPRESENTATIVES from education, business, and philanthropy have organized the Learning Resources Institute to improve the quality of education through research into the learning process and better use of instructional aids, such as television, films, radio, learning machines, and all types of written materials.

At present, the Institute, in cooperation with the American Association of Colleges for Teacher Education, is administering the two "Continental Classroom" courses in physics and chemistry. Other projects which are being planned include production on film or video tape of a variety of instructional courses for students at the elementary, secondary, and college levels, and the establishment at Princeton, New Jersey, of a center for re-

search, development, and demonstration of new technological aids to the learning process. The Institute will also provide a consulting service for schools, colleges, and regional organizations.

The following national educational organizations are constituent members of the Institute: American Association of Colleges for Teacher Education, American Association of Junior Colleges, American Association of Land-Grant Colleges and State Universities, American Association of School Administrators, Association of American Colleges, Council of Chief State School Officers, National Association of Educational Broadcasters, National Educational Television and Radio Center, and State Universities Association. The Institute is supported by private foundations and industrial organizations.

THE University of Wisconsin and the Wisconsin State Historical Society have issued the first American translation of the section on American history in the new Soviet encyclopedia. The translation, entitled *A Soviet View of the American Past*, was critically annotated by members of the University history faculty and the Society staff. It is being issued simultaneously in book form, with a prefatory statement by Adlai E. Stevenson on Soviet-American relations, and in the *Wisconsin Magazine of History*, the quarterly journal of the Society.

THE New England Board of Higher Education has published the first edition of *Facts about New England Colleges and Universities*, a publication containing data on enrollments, tuition costs, and the academic qualifications of faculty members in 186 of the region's 189 institutions of higher learning. Data of interest to the general public have been summarized in graphs and tables. The questionnaire survey which was the source of information for this book was conducted in the spring of 1959. Free copies may be obtained from the headquarters of the NEBHE, 31 Church Street, Winchester, Mass.

THE College of Literature, Science, and the Arts of the University of Michigan has adopted an experimental admissions policy. For a two-year period following June, 1961, all freshman applicants will be required to take the College Entrance Examination Board's aptitude and achievement examinations. During the experiment, only applicants from outside Michigan will be denied admission solely on the basis of low scores on these tests. It is expected that information gained from the tests will enable the College to eliminate material from introductory courses which has already been covered in high school and to place students of superior ability in advanced courses.

THE Fellowship Awards Committee of the American Association of University Women has announced that $108,500 will be awarded in fellowships for 1961–62. American women are eligible who have achieved professional recognition or who have either been awarded the Ph.D. degree or fulfilled all the requirements for it except submission of the dissertation. Fellowships are not restricted by the age or field of study of the applicant, and may be used in the United States or abroad. The deadline for filing applications is December 1, 1960.

A QUARTERLY Russian-language newspaper, *Sputnik Studenta*, written and edited by three students in the College of Science, Literature, and the Arts at the University of Minnesota, has successfully completed its

first year. Circulation has increased from 1,000 to about 3,000 copies, which are distributed to students of Russian around the world. Among the schools using the newspaper in the United States are the Massachusetts Institute of Technology, Pennsylvania State and Purdue universities, the University of Utah, and the U.S. Army language school at Monterey, California.

THE Institute of International Education has established the Research Information Unit, a center for information needed in research in the field of international education. Statistical and other kinds of material about the international exhange-of-persons movement, educational systems around the world, and the teaching of English as a foreign language will be available to organizations and individuals who are conducting research in the field of international education.

THE American University has received a grant of $100,000 from the Ford Foundation to establish a Master's degree program in the teaching of English as a foreign language. Required courses in linguistics, teaching methods, cultural anthropology, and American literature, history, and civilization will be given at the University's American Language Center. Twenty qualified graduate students will be enrolled in the program each year. A Master's degree in English or international service will be granted to those completing degree requirements.

TO STRENGTHEN the interest of able high-school students in science, the National Science Foundation is sponsoring 137 Secondary-School Student Training Programs at 129 colleges, universities, and non-profit research organizations in forty-three states, the District of Columbia, and Puerto Rico. During the summer, about 6,700 students will attend college-level programs, from two to twelve weeks in duration, designed to help them prepare for careers in science, mathematics, and engineering. Limited funds are available for those who cannot attend without aid. The cost of the program will be about $1,850,000.

A STUDY of the relationship between an individual's level of accomplishment in school and his later achievement in business or one of the professions has been begun by Columbia University's Conservation of Human Resources Project. The present performance level of three hundred persons who received fellowships from the University between 1945 and 1950 will be investigated and evaluated; in addition, the educational backgrounds of a group of persons with a similar period of work experience and a high level of achievement in business or one of the professions will be studied. The study, which is supported by a grant of $91,000 from the Carnegie Corporation, will require two years for completion. The findings are expected to reveal some psychological and sociological determinants of superior levels of achievement.

THE law schools of the University of Michigan and Wayne State University, in co-operation with the Michigan State Bar, the extension service of the University of Michigan, and the jointly operated Division of Adult Education, will soon establish an Institute of Continuing Legal Education. An executive committee composed of three faculty members from each law school will determine educational policies, approve programs of study, and prepare the annual budget. The two universities will contribute $15,000 apiece to finance the first eighteen months of the new program.

Reviews

CHARLES ELIOT NORTON: APOSTLE OF CULTURE IN A DEMOCRACY, *by Kermit Vanderbilt.* Cambridge, Massachusetts: Harvard University Press, 1959. xvi+286 pp. $5.50.

One of the most puzzling chapters in the history of American civilization was provided at the close of the nineteenth century by a small group of latter-day idealists who fought out the lost cause of what they believed to be "standards of character and of conduct" against the moral chaos of the Gilded Age. Santayana—in many ways one of them—tagged them cynically as "genteel"; Howells, who apparently was leading the fight for realism and the future, became their devoted disciple; Henry James, Mark Twain, and Henry Adams were torn by the ambivalence of the forces in American society, and sought escape, each in his way.

Charles Eliot Norton was for many years the leading spokesman for this group, the living symbol of the "genteel tradition." He has long been alternately admired and scorned, but never, up to now, studied dispassionately. To understand him as the "apostle of culture in a democracy" and to give him accurate but sympathetic treatment without blurring either his strengths or his prejudices was an ambitious undertaking for a young scholar. Mr. Vanderbilt has succeeded, in a remarkably small space, in giving us a full-length, just, and human portrait; in so doing, he has accomplished more than any other recent critic in defining and evaluating the defense of ideality which marked the latter phases of the romantic movement in American arts and letters on the eve of the modern period.

For Norton's was not an ivory-tower retreat from reality. He went out of his way, in spite of lifelong ill health, to confront what he believed to be the materialism and anarchy of rampant democracy. He stood his ground on the values he had inherited, and he spent his entire life fighting for the American society he believed in. The son of Andrews Norton, who led the attack on Emerson's religious liberalism in the late thirties, Charles Eliot Norton accepted—as did Longfellow, Lowell, and the lesser members of the group—the intuitive idealism which Emerson had substituted for Unitarian reason. From this basic position, however, he moved, as Emerson did not, into humanitarianism, active participation in social causes, and the scholarly study of the past. Breaking finally with all religious tests of value, he substituted the beliefs that environment and personality combine to create a culture, and that the way to combat the evils of democracy is to study the great cultures of the past. His studies of Dante, Donne, and the cathedrals and art of the Middle Ages and the Renaissance were all made in the interest of the American present as he saw it. He set out to educate America in the tradition of humanism. For this, he believed a scholarly elite to be necessary, and he was ready to stand alone, if need be, in the desert

of American materialism. The first professor of fine arts at Harvard, he became an ardent propagandist for archaeology and foreign literatures as well as for higher education in the humanities, but he also fought for the conservation of natural resources and against the tide of "alien" immigration and the Spanish war. His final journey to the Columbian Exposition in Chicago revealed his enthusiasm for American energy together with his scorn of American "vulgarity." He was to the end of his life as ambivalent as the age in which he lived.

Blind and prejudiced as he inevitably was in so many ways, Norton thus became one of the few great individualists of a leveling society, and so was able to survive his times and bridge the gap between the American humanism of the mid-nineteenth century and that of the present, even though, to do so, he had to reject most of the culture of his times. Mr. Vanderbilt has made it possible to study this transition chapter in the history of American civilization with a wisdom and tolerance that have heretofore been sadly lacking in the proponents of either idealism or realism.

ROBERT E. SPILLER
University of Pennsylvania

KEEPING THE UNIVERSITY FREE AND GROWING, *by Herman Lee Donovan.* Lexington, Kentucky: University of Kentucky Press, 1959. xvi+162 pp. $4.00.

President Donovan's book is a valuable addition to the growing body of literature dealing with the land-grant colleges and state universities. It is, as he says, "a report on the major problems that one college president encountered, how squarely he faced them, and how he tried to solve them." One gets the impression from his modest account that the problems of the University of Kentucky during these fifteen years have been formidable, though many of them are typical of state universities; that President Donovan faced them with considerable resourcefulness and courage; and that he solved most of them as well as they can be solved.

To any reader with experience of state-university administration, the book has all the fascination of recognition: typical problems, typical attitudes toward them, typical public misunderstandings, turn up on every page. It is always interesting, and often encouraging, to find that other institutions have struggled with problems similar to one's own, and to note the differences and the particular reasons for them. I hope we shall have more books of this high quality, case studies which throw a valuable light on common problems of our publicly supported institutions of higher education.

President Donovan properly emphasizes one crucial problem facing all state universities: the threatened loss of autonomy. There is a growing tendency to treat the university as an agency of the state, subject to the same detailed and routine budgetary and administrative controls that are applied in all other state institutions. This means, in practice, that educational policy is decided, not by the president and the faculty and the board of trustees, but by some subordinate state official, usually after long delay. Mr. Donovan's plea to halt this "creeping paralysis" is perhaps the most important, certainly the most urgent, message of this book.

Though the book will no doubt find most of its readers among the fraternity of college administrators, one hopes that it will also be read by members of the general public, inside

and outside the state of Kentucky. It would be good for many more people to know, for example, that publicly supported universities do not get all their funds from taxes, and could not, indeed, function at all without substantial private gifts. For a long time, the University of Kentucky could keep its faculty only with the help of private funds which were available to supplement the deplorably low salaries provided by the state. As in many another public university, the things which make it truly a cultural and intellectual center of the state—speakers, concerts, art exhibitions, rewards for special excellence, research funds—had to be financed from sources other than taxation. It is part of the duty of a state-university president to point out to his constituency, the people of the state, that funds spent on education and research constitute an investment which pays very great dividends to the community as a whole; but the struggle for adequate financing is a constant preoccupation of the heads of public institutions no less than of the presidents of private colleges.

The chapter on athletics, with which department of college life the University of Kentucky has had some spectacular successes as well as equally spectacular troubles, is also of very general interest. Anyone who thinks the matter is simple might learn a lot from reading Mr. Donovan's reasons for stating that "the most trying problem of a college administrator is the athletic program."

In a useful appendix, entitled "Reading Assignments for College Presidents," Mr. Donovan gives an excellently chosen list of books by other college presidents or about them. (One wonders how many college presidents nowadays have time to read any books, much less to write them.) I wish there were some way of "assigning" his own book, not only to other college presidents, who will probably pick it up anyway, but particularly to trustees, faculty members, governors of states, and members of all state legislatures.

LEWIS WEBSTER JONES
National Conference of Christians and Jews

AUTONOMY OF PUBLIC COLLEGES: THE CHALLENGE OF COORDINATION, *by Lyman A. Glenny*. New York: McGraw-Hill Book Company, Inc., 1959. xx+325 pp. $5.95.

Here is the report of a segment of the potentially significant studies of diversity in American higher education going on under the chairmanship of T. R. McConnell at the University of California's Center for the Study of Higher Education, financed chiefly by grants from the Carnegie Corporation of New York.

Conceived in part as a portrayal of existing variety in state administrative structures for higher education in twelve selected states, with an exposition of three general types of efforts to achieve co-ordinated statewide systems, the book accomplishes its purposes partially, and is in many senses a respectable and timely contribution.

Some of its shortcomings, however, seem to this reviewer quite difficult to condone. The inversion of title and subtitle makes the name of the volume strangely malappropriate. How a book purporting to deal with "autonomy" could omit any mention of the historic constitutionally independent status of the principal state universities in California, Minnesota, and Michigan is a major mystery.

California is the author's state of residence, the site of the headquarters of the study, and one of the twelve states selected for examination. Minnesota is said to have been studied but

is not given a place in the report. Michigan was not investigated. But these limitations hardly excuse the author and his advisers from closing their eyes and ears to one of the most important distinctions in the whole evolution of state-supported higher education in the United States. Indeed, one is at a loss to guess whether this omission was inadvertent or by design, and, in either event, how or why it could occur.

In an attempt to evaluate the merits and defects of *consolidation*, *compulsory co-ordination*, and *voluntary co-ordination* of institutional governing boards in a state-wide system, the author industriously marshals the meager testimony (much of which is unhappily not much above the level of hearsay) and traverses the well-worn arguments of the political and administrative theorists; and he is not quite able to abstain from leaving an impression that this solves the problem—in favor of a formal bureaucratic system and against voluntary co-ordination. Lest this be adjudged an overdrawn statement of the final thesis, let it be said here that he wisely urges that any sort of co-ordinating agency assume a leadership role based on persuasion instead of relying solely on powers of compulsion; that he rightly rates the continuous conduct of research as a highly important and often neglected function of any such agency; and that he disclaims any intent to set up a "model" form of administrative organization.

Although seemingly aware that the California state colleges operate in a fiscal strait jacket, he tends to underestimate the ill effects of extending the tentacles of non-educational state fiscal offices into the management of colleges and universities, and apparently ignores the strong recent trend in administrative theory which favors the relaxation of too minutely detailed fiscal controls, extending from the highest echelon to the operating units in any large business or governmental organization. He observes, however, that

> by means of controlling expenditures through the preaudit and through controls over purchasing, personnel, and plant construction, state executive offices do determine many educational policies . . . in several states such decisions are made in the agencies by lower-echelon personnel, who lack experience in and understanding of the functions of higher education and of the management practices which promote its best interests (pages 266–67).

Defects aside, the book is a penetrating and useful analysis in a field where conclusive objective evidence is next to impossible to unearth. That Glenny has made a solid contribution is affirmed even by one who marvels at his omissions and cavils at some of his conclusions. McConnell has supplied a judicious and perceptive ten-page Foreword.

M. M. Chambers
University of Michigan

The Integration of Human Knowledge, *by Oliver L. Reiser.* Boston: Porter Sargent, 1958. xxvi+469 pp. $8.00.

In the Foreword of this book, Giorgio de Santillana writes that the author has undertaken "to cope with the well-nigh impossible, to give shape to the unthinkable and to venture far out into the unspeakable." Mr. Reiser himself says that some of the problems he examines "leave one dizzy." Perhaps no better description of the book is possible. Since it is in itself merely an outline of an elaborate speculative metaphysics, vague in many of its details and highly conjectural throughout, one can only say that the author has tried to base his conclusions, whenever

possible, on recent scientific data, and that he has used the only method available for this sort of enterprise, viz., more or less crude analogical arguments.

Starting with data which include mathematics and symbolic logic, field-theory physics and cybernetics, emergent evolution and social embryology, and psychokinesis and extra-sensory perception, he endeavors to establish the fact that man is not, as he is commonly supposed to be, the summit of creation. Instead, when we approach him by ascending from electrons through atoms, molecules, single-celled organisms, and many-celled organisms, we realize that he is himself an element in a more extensive "World Sensorium," and an "action-pattern" in an emerging "Planetary Democracy." Human beings in their relations to one another and to their environment can be considered as the sensorium of a cosmic mind in much the same way that cells and cell groups, in their interrelations and in their relations to the external world, constitute the sensorium of the individual mind. The justification of this leap to the "social cortex" of a universal civilization is a presumed isomorphism between electronic computers, human brains, and our highly integrated society, with its various tools of communication, electrical and semantical.

The educational implications of this panpsychistic metaphysics are obvious. (1) We must abandon the teaching of fragmented knowledge and replace it by courses in "the interaction of the sciences, the religions, the arts, and man's social institutions" (page 6). (2) We must try to achieve cultural and moral integration by creating a new "religion of humanity" which will provide a substitute for the now conflicting world religions.

The book is somewhat repetitious, and hard to read because of the required familiarity with many abstruse scientific concepts. It contains a number of diagrams which are often difficult to understand, even with the expository material in the text. But it provides a good example of a speculative metaphysics in an age when too much philosophical attention is devoted to problems of linguistic confusion and too little to problems of what the world really is.

A. Cornelius Benjamin
University of Missouri

The Adventure of Learning in College: An Undergraduate Guide to Productive Study, *by Roger H. Garrison.* New York: Harper and Brothers, 1959. xii+270 pp. $3.50.

Most college teachers have at some time in their careers felt impelled to say to students in doubt or in difficulties, "Just why are you in college, anyway? What is it that you expect from this experience?" This book asks students to face exactly these questions and to consider some adult answers to them. Addressed to students, the work is an effort to help them to get the most out of their college experience by discussing for them the essential, inner meaning of an education. Written in a simple, direct style, and employing the device of semi-fictional reports on typical college experiences to illustrate various points, it offers students a conspectus of their development in college through such chapters as these: "Why Am I in College?", "The Strains of Beginning," "The Confusion of Aims," "A Widening Awareness," "Classes: A Transmission System," and "You—and Teachers." The author is a middle-of-the-road conservative in his views on the educational process: he rightly stresses the academic, intellec-

tual side of college as "the main show" (although he devotes an interesting chapter to the values of "productive" extra-curricular activities); but he also admits that much of what passes for a college education is mere rote learning and fact-cramming.

The principal merit of this book, it seems to me, is its constant insistence that "getting an education" is not a passive experience, not merely a matter of listening to lectures, taking notes, and regurgitating the results in bluebooks; that the value of an education depends on the active intellectual involvement and emotional response of the student in the intellectual life of the classroom or in his solitary study in the library. The point is driven home again and again in statements such as this: "Implicit in learning is the need for you, as the learning person, to be *creatively active in the presence of the things you must learn*. . . . You won't learn much of anything significant unless you *feel the need* to do so" (pages 125, 126, italics inserted by the reviewer).

Similarly, the need for proper motivation is spelled out as follows: "You came to college presumably because you *are* interested in what the institution offers. To put the burden of stimulus and excitement and motivation wholly on your teachers is both immature and impractical" (page 195).

One or two minor reservations may be noted here: the reviewer as a teacher with twenty-five years of experience finds some of the anecdotes too good to be true. In occasional conferences, the instructor may be as perceptive and patient, the student as *docilis* and enlightened, as the stories suggest; but in my experience this is all too rare. And I am sorry to see repeated (on page 226) the old etymological error, dear to educationists, that " 'education' is derived from *e-ducere*, 'to lead out,' " instead of the correct form, *e-ducare*, "to rear or nourish" (see Harper's *Latin Dictionary*, with the citation from Festus). Let it be added, to Mr. Garrison's credit, that he keeps his eye generally fixed on the "nourishment" which a true education must provide.

This book might be read with profit by most serious college Freshmen or Sophomores, and certainly by all Freshman advisers. I can give it no better recommendation than to say that I intend to lend my review copy to all the students I counsel.

CHARLES T. MURPHY
Oberlin College

ISSUES IN UNIVERSITY EDUCATION, *edited by Charles Frankel.* New York: Harper and Brothers, 1959. xvi+175 pp. $3.95.

The plan for the ten essays which this book comprises originated in discussions at regional conferences of senior Fulbright scholars, sponsored for five years by the Edward W. Hazen Foundation and later by the U.S. State Department. Some five hundred visiting scholars and over one hundred and fifty American representatives met on twelve occasions "to explore the meaning of the American experience in higher education."

The editor, Charles Frankel of Columbia University, explains that the collection was planned to present a distillation of the experiences of many scholars who met in these conferences. At the same time, each of the ten authors worked from only a general assignment of topic, and was responsible for his own treatment. There is no single point of view in the book and, indeed, there is little unity in the over-all presentation.

The uniqueness of the book arises from its international background. American higher education is the center of the focus, but the context

is that of world-wide scholarship. This approach brings breadth to the discussion, whether it be of history, philosophy, or current organization.

In his introduction, Paul J. Braisted, president of the Hazen Foundation, identifies the main themes:

> . . . The rising demands for higher education, the need for scientific and technological knowledge and training, the role of the traditional humanistic disciplines in the midst of rapid social change, the accelerating rate of increase of knowledge, and the need for its wider dissemination (page xiii).

The essays all contain "fresh reflections," Mr. Braisted claims, "occasioned by a new sort of experience in international communication."

The issues treated at more conventional meetings of educators are included here: the impact of rising enrollments, the inadequacy of economic support, the demands for vocational and professional training, the role of liberal education, the opportunities in basic research, the significance of the service concept in higher education, the limitations and deficiencies of campus life, the issues surrounding the teacher, the call for renewed intellectual orientation. But these and similar topics are used to identify larger themes: the problem of the scholar in modern times, the unity of scholarship on the world scene, the role of science in the human community, and the democratization of educational opportunity.

In his summary chapter, Mr. Frankel gives the keynote:

> American higher education is a social institution, like religion, the state, or the property system, and its problems originate in the same way problems originate in these other institutions. They arise out of discordant traditions, out of internal conflicts of interest and external collisions with other institutions, out of the emergence of new needs and new resources, and, broadly, out of the interplay of human ideas and ideals with the refractory conditions of human nature and the social and physical environment (page 151).

It is a limitation of the book that the essays do not seem to be addressed to the same audience. For example, two of them, "The University and the Community" and "In Loco Parentis: University Services to Students," are well-grounded and interestingly written descriptions which would be very helpful to foreign scholars wanting perceptive accounts of American colleges and universities. For the American teacher or student experienced in higher education, there is little that is new in these two statements. On the other hand, Sigmund Neumann's discussion of "The Meeting of Minds and the Making of the Scholar," and Robert Ulich's "The American University and Changing Philosophies of Education," are stimulating discussions of philosophical concerns which will appeal even to the experienced observer of the American scene. However, this unevenness in treatment does provide something for different kinds of professional readers.

Issues in University Education is an important addition to the current bibliography of studies in American higher education. Serious students of the organization and administration of higher education will want to become acquainted with this volume.

The authors, in addition to those mentioned, are Richard McKeon, Gray Distinguished Service Professor, University of Chicago; J. Robert Oppenheimer, director of the Institute for Advanced Study; John Hope Franklin, professor of history, Brooklyn College; Robert B. Brode, professor of physics, University of California; Irwin T. Sanders, lecturer in sociology, Harvard University; and Robert M. Strozier, president of Florida State University.

DAVID D. HENRY
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